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LECTURES, MONOGRAPHS, AND CASES.

A Clinical Lecture upon some of the Diseases of the Spinal Cord. Delivered in Bellevue Hospital. By T. Gaillard Thomas, M.D.

Active Congestion of the Spinal Cord, causing Paraplegia and Death.—The first case to which I shall call your attention this morning, gentlemen, is that of the young woman who now lies before you in a paraplegic condition. Her name is Agnes Kilvain; she is a native of Ireland, but has resided in this country for fourteen years; is married, but has had no children, and has been living in a tenement house in this city, performing the duties of housekeeping. Upon inquiry, we find that she has no well-marked hereditary predisposition, that her habits have been moderately intemperate, and that she has been, until the present attack of illness, a robust woman. She gives us the following history of her present illness: On the evening of Nov. 23d, 1861, which she says was very cold and inclement, she walked out after dark with very thin shoes and stockings, and got her feet wet, and body thoroughly chilled. She retired that night, feeling, however, about as well as usual. During the course of the night she awoke from a sound sleep, with a peculiar "heavy feeling in the feet;" and finding that she lifted them with difficulty, and that they seemed to be numb and "asleep," she roused her husband, who was by her side, and told him of it. He made light of the symptoms

which had "alarmed her," and she in a short time fell asleep again, and did not awake until morning; then she found the heavy feeling and inability to move the legs very marked, and getting out of bed with much effort, found that she was unable to stand; in fact, that she was entirely paralyzed in the lower extremities. This, I told you, took place on the night of the 23d of November; on the 6th of December she entered this institution, having been confined to bed, and been paralyzed during the intervening time.

We find her now in the following condition: She lies quietly upon her back, and does not appear to be suffering at all; her pulse is 120 to the minute, and in character nearly normal; her skin is warm and dry, but not of a feverish dryness or warmth; her tongue is covered slightly with a white fur. Over the sacrum, a slough of considerable size, about equal to that of the extended hand, has occurred. The paralysis of the legs is almost complete; the patient being able only to draw them up slowly, and with much effort, for six or eight inches, in bed. She is utterly unable to stand, and we may say that the paralysis of the inferior extremities is as complete as it well could be. She complains of nothing beside the loss of power, but has, during her illness, experienced pain in the back. Upon firm pressure, a little pain is found to exist over the second and third lumbar vertebræ. Her menstrual flow is irregular. She has occasionally had jerking of the legs, and formication appears to have existed, but not positively. At present, sensibility is much impaired in the paralyzed limbs.

Diagnosis.—The facts that this attack came on so suddenly, has become so complete, and has been accompanied by such evidences of profound nervous derangement in the paralyzed parts, lead me very positively to the conclusion that the spinal cord is seriously affected, and that its structure has become altered, probably, to an irreparable degree. The patient was, you observe, perfectly well on retiring to bed, in the morning rose completely paraplegic, and has continued so since. The affections of the cord, which might have resulted thus, are the following: active congestion, spinal apoplexy, and red softening; I know of none other which would have been likely to give us the train of symptoms which have been here presented to us. I do not believe that we have to deal with a case of simple congestion, because the attack was too complete and sudden for that; and if congestion did exist as the pathological state in the beginning, it must have been followed by softening for such grave results to have followed. Spinal apoplexy I would discard, because the attack was not sudden enough

for this, because it was accompanied by too little pain, and because that condition is at best a very rare affection.

I therefore venture upon the diagnosis of red softening, reminding you, however, of the great difficulty of determining positively concerning the lesions occurring to this delicate organ.

Prognosis.—The patient is so completely paralyzed, and has become so much weakened already, that no one experienced in such cases would hesitate about making a decided prognosis against her recovery, and I believe that in a very short time she will succumb.

Treatment.—Had I seen this patient in the beginning, I should probably have cupped or leeched her freely over the painful spot on the spine, kept her perfectly quiet in bed, and after a cathartic, given ergot, belladonna, or iodide of potassium, as possessing (as proved by Brown-Séquard) the power of disgorging the vessels of the cord. Now, however, very little can be done. I shall order that her bowels be acted upon by a saline cathartic, and that two nitric acid issues should be placed on each side of the spine, opposite the painful part. The patient will be kept quiet, and will receive the best diet afforded by the institution.

Dec. 16th.—I have to report to you to-day the death of Agnes Kilvain. From the last date she went steadily down, growing weaker every day until to-day, when Dr. Frank Lyman, the House Physician, was suddenly called to her, and found her in a syncopic state, from which she could not be roused.

Post-Mortem Appearances.—Dec. 18th.—Since we last met, the body of Agnes has been examined. Nothing worthy of note was found in any organ except the cord. This was carefully removed by Dr. Lyman, and as nothing could be learned from an examination by the eye, I submitted it for microscopical examination to Drs. Metcalfe and Echeverria, who made concerning it virtually the same report. Dr. Echeverria was kind enough to give me a written report of his investigation, which I give you in his own words:

"The bodies of the four dorsal vertebræ were neither rough, nor changed in their structure; there was no thickening, and very little congestion, of the dura mater. The meninges, however, were much congested, but without any thickening or trace of exudation.

"The external appearance of the cord was natural, and it felt uniformly consistent. Being cut through the posterior median line, the gray matter appeared of normal consistency, and exhibited a light rose coloration, more marked in the lower part of the cord.

"In the cervical region (lower part) the gray matter presented

two small clots, certainly produced after tearing of the vessels during post-mortem examination, as there was no congestion around them, nor any of the characters of apoplectic clots.

"Examined under the microscope, the white matter was normal, with a congestive state of its capillaries.

"The gray matter exhibited in the lumbar region a more increased vascularity than in the others. It was also found more abundant with *myelitic* cells and nuclei, and with a more granular amorphous matter; but without corpuscles of exudation, nor any trace whatever of albuminous exudation—no abnormal existence of fatty cells and granulations. There were also some multipolar nervous cells.

"The ganglia in the lumbar region were abundant in fatty granulations, but normal as to the rest of their structure."

Remarks.—In this case, then, gentlemen, there was an error in diagnosis; that error arising from the fact of our undervaluing too much the results of simple congestion of the cord, or rather, from our venturing to exclude this pathological state, upon the ground of the extreme gravity of the symptoms. The bearing of the diagnosis upon treatment is too obvious to need mention, but even with the light given us by this case, I confess that in another of similar character, I know of no means by which a differentiation could be made. True, Brown-Séquard declares that in myelitis the urine is always alkaline, while in other states it is acid; but I know too little of this test to speak of its reliability.

Congestion of the Spinal Cord, and commencing Myelitis—producing Paraplegia, &c.

Jan. 8th.—The patient whom I now show you, gentlemen, entered the hospital on the day before yesterday. Her name is Sarah Murray; she is 23 years of age, a native of Rhode Island, and is married. Previous to the present illness, she had always been a robust and healthy woman. No tendency to hereditary disease is traceable in her family history. In answer to our questions, she gives us the following account of the attack of sickness which has brought her into our service: On the 19th of December last she went to bed feeling perfectly well, after having been at work all day. Some days before this she had been exposed to cold, but had felt no evil effects from it, and can trace no connection between it and what I am going to tell you occurred on the night of the 19th of December. On this night she woke up experiencing a pain and numbness in her legs, and to a certain extent in her arms. Her feet felt precisely as if frost-bitten, and

on attempting to move them, she found that their strength had become greatly impaired. The pain in the legs was so severe that she could not again get asleep, and upon rising in the morning and endeavoring to put on her shoes, she found that she "had no feeling in her feet." After this, the numbness and pain extended up the legs, till in two days both lower extremities, from the hips down, were affected to such an extent that she could not walk at all, and could stand only with assistance. The upper extremities were also affected, though in a much less degree.

There is now pain in the back, but before admission here it did not annoy her. This pain does not extend around the body. She is much troubled with jerking and twitching of the muscles of the legs, but has had no convulsive movements of them. She has been constipated; for four days on one occasion, and then procured a dejection only by medicine. Soon after her attack, (in fact, the very morning after it,) she noticed that her urine dribbled away from her, and that an attempt to urinate gave her pain.

When asked as to the sensations felt in the lower limbs, she says that she has the feeling of pins driven rapidly into the flesh.

The sensibility of the extremities is not impaired, and the feet are not inordinately cold. The paralysis seems to have been progressive, for she cannot now stand at all. Upon examining the painful spot on the spine, we find it tender upon pressure; and you observe that as I take this lump of ice in my fingers, and pass it slowly down the spinal column, the patient does not complain until we reach this spot, when she cries out that the cold is so very intense that she is unable to stand it. At the present time, I would remark, there is no incontinence of urine, and that that fluid is normal in amount, and of acid reaction.

This is the history of the case—let me now rapidly point out its leading and characteristic features. A perfectly healthy and robust woman retires to bed in her usual health, rises in the morning partially paraplegic, and in two days becomes almost completely so. Twenty days have passed since that time, and she is very much in the same state; has not improved, and yet has not grown materially worse. Now, what diagnosis would seem best to explain the series of symptoms which we have before us? Unquestionably, the spinal cord is the delinquent organ, for upon the lesion of no other could this grave departure from proper innervation depend. But what morbid state of this delicate structure probably exists? From the fact that the attack came on very suddenly, was accompanied by

disorder of the bladder, pain in the back, very violent pain in the legs, prickling, and jerking of the muscles, we have, I think, every reason to deduce the conclusion that some acute organic affection exists. From the circumstance that no symptoms of the disease existed previous to the night of the 19th, we are safe in concluding that the paraplegia then occurring did not depend upon pressure from any tumor within the spinal canal, from any disease of the vertebræ, or from any gradual and subtle alteration supervening upon depraved nutrition—all of which would have produced their results more gradually. There are but three acute affections of the cord which could have presented us with this suddenly occurring series. One of these is active congestion; another, inflammation of the spinal meninges; and the last, myelitis, or inflammation of the cord itself.

I do not believe that this woman has spinal meningitis: 1st, because she had for nineteen days no pain in the back, and no violent pain on moving the body forward, or moving the lower limbs upon the trunk; 2d, because she has had no spasm of the muscles of the back, which is almost constant in meningitis; and 3d, the mere fact that that disease, without cerebral meningitis, (of which this patient presents no symptom,) is of very rare occurrence. The diagnosis rests, then, between active congestion and local myelitis. Taught by the error committed in the case of Agnes Kilvain, let us give to the former of these due weight, and not discard it on account of the gravity of the symptoms presenting themselves.

I am inclined to hope and believe that in this case we have to deal with congestion of the cord, and not with inflammation of its structure, and these are the reasons which so incline me. It is a fact worthy of note, and which I have already mentioned, that in myelitis the urine almost always becomes alkaline. Now in this case it has been twice tested, and found acid. In myelitis a constricting band is commonly felt around the body. Here there is none. Were this myelitis, the paralysis would have increased very much within the three weeks which have intervened since the patient's seizure. We find that such is not the fact. But there is one circumstance which gives to the case the appearance of myelitis—namely, the occurrence of severe pain and sense of great coldness, as a lump of ice pressed down the spine reaches a certain spot, where likewise pain upon pressure, and pain even without pressure, exists. Recollect that the patient is distinct and positive in her assertion that this pain was absent before her entrance here, which was only two days ago, and you will agree with me, I think, in regarding this as the probable commencement of

myelitis, the result of a congestion which had existed for nearly three weeks. The diagnosis which I venture, then, for the reasons which I have given, to make in this case, is congestion of the spinal cord, perhaps with commencing myelitis.

With regard to the prognosis. If there is here only congestion, it is favorable; but if inflammatory softening of the cord has occurred, it is exceedingly grave. From the incompleteness of the paralysis, we hope that softening has not occurred, and hence the diagnosis is not hopeless. Fortunately, the treatment of the case would be the same for both the diseases, of which we suppose our patient to have one. The indication is clear, to diminish the circulation of blood in the congested or inflamed part. With this object in view, I shall order the application of 12 dry cups along the spine every day, and the unguentum belladonna to be rubbed vigorously over the same part night and morning. In addition to this, Dr. Fisher, the House-Physician, will see that her bowels are freely acted upon by the compound cathartic pill of the U. S. Dispensatory; and should the pain in the legs or back be at any time very violent, he will inject into the areolar tissue of the part 10 drops of Magendie's Solution of Morphia. Is there any medicine by which we may diminish the vascular supply to the cord? Thanks to the investigations of that great physiologist, Brown-Séquard, there are. He has proved, by direct experimentation, that belladonna, ergot, iodide of potassium, and mercury have this effect, while strychnine and sulphur increase it. This patient will be put, then, upon the use of powdered ergot, in 5-grain doses, thrice daily, belladonna being at the same time used externally. Dr. Fisher will see that every means is taken to prevent bed-sores or sloughs, which in these cases are common and serious, and nutritious, unstimulating food will be ordered.

Jan. 25th.—Seventeen days have now passed, gentlemen, since we investigated together the case of Sarah Murray, during which time you have seen her four or five times. Let me now report to you her progress, as noted by Dr. Martin, the Assistant House-Physician of the wards.

Jan. 10.—The treatment has been steadily pursued, but so far with no apparent benefit. The pains are very distressing, and the power of motion seems to be diminishing. Sensibility in the legs and arms does not seem to be greatly impaired. She has now no trouble in retaining or passing her urine.

Jan. 12th.—Although the woman gives no history of syphilis, still it was thought from the character of the pains, from some enlarge-

ment of the inguinal and post-cervical glands, and from some eruption of a scaly character on her legs, that there might be a specific element in the case; and she was ordered iodide of potassium in large doses. Other remedies continued.

Jan. 15th.—Patient says she is getting worse; the pains in the legs banish sleep. Ordered a pill of hyoscyamus at bedtime.

Jan. 20th.—Condition scarcely changed. Treatment has been the same. The repeated cupping and use of belladonna have relieved the pain in the back, but in the extremities the pain is as great as ever.

Jan. 24th.—Has been taking iod. potass. since last date; seems a little better; can stand alone, and even take a few steps. Pain not diminished.

Jan. 25th.—She was able to get out of bed and sit up nearly an hour to-day. Pains no better; ergot resumed.

You now have the progress of the case up to to-day. Helping the patient out of bed, and holding her to walk, you perceive that she is much better, although still very weak; the fact that she is now able to totter across the floor, whereas, upon admission, she could not even stand, is decidedly encouraging, and her improvement almost convinces us that myelitis, if present, was in its incipiency, and had not progressed to softening.

It is possible, however, that this disease is even now slowly progressing, and that the improvement in the patient is due to our having overcome the congestion which existed before and with it. Time alone can settle this point; and as it passes I shall keep you informed of the progress of the case.

March 1st.—Sarah Murray has improved very steadily and rapidly; walks with comparative ease, and is evidently recovering from her paraplegia. Treatment continued.

Paralysis of Upper and Lower Extremities, due to a Tumor in the Spinal Canal.

The patient's name is John White; he is sixty-one years of age, a native of Ireland, and was admitted here on the 14th of December, suffering from an attack of asthma. The following is his previous history, as recorded by Dr. Lyman, the house-physician of the service: For two years past the patient has been subject to attacks of asthma, and on several occasions has had hæmoptysis. During the past winter he has had a cough, and has emaciated somewhat.

For the past year the right hand has been affected by paralysis agitans. On the 10th of January he began to complain of pain over the

spinal column, opposite the juncture of the cervical and dorsal vertebræ, which he described as being constant and severe. It extended down the muscles of both upper extremities, and between the scapulæ. At this time his pulse was 120 to the minute; tongue covered with a thick, white fur, and all the secretions and excretions markedly acid. The pain being regarded as rheumatic, he was put upon alkaline remedies, but did not improve; in fact, his condition remained the same until the 14th of January, when he complained of pain in the left arm, and lost power in that member. On the next day his left leg became paralyzed; on the next, his right leg, and soon after the right arm also.

This condition has continued until the present date, the 18th of January, 1862. I will now give you his present symptoms. He has, as you observe, lost almost entirely the voluntary control of his upper limbs, and entirely that of his lower. His pulse is about 140 to the minute, quick and weak; he respires laboriously, and with inspiration there is a loud laryngeal rattle, showing the accumulation of mucus in the larynx and larger bronchi. There is considerable pain in the back, opposite the upper dorsal vertebræ, increased by pressure. Paralysis of the bladder exists to such a degree that the urine has to be drawn off by the catheter.

He tells us that he has jerkings of the legs, due to irregular muscular movements, but no formication or prickings have been noticed. Reflex movements in the lower limbs are perfect, and loss of sensation is not entire.

Over the apices of both lungs dullness exists upon percussion, and a blowing sound is perceived upon auscultation over the right mammary region.

Diagnosis.—From the fact that the patient has had hæmoptysis, cough, emaciation, and that these rational signs are supported by the physical ones of dullness under the clavicles, I should conclude that a certain amount of tubercular deposit has taken place in the apices of his lungs, and it is highly probable that upon this depends the asthma of which he has complained during the last two years. The blowing sound heard with the heart's systole may depend upon aortic obstruction or roughness, or perhaps upon the extremely anæmic state of the patient, which I shall not stop to consider, for it in nowise concerns the main disease from which he labors, namely, paralysis of all his members. For the explanation of this, we must go to the spinal cord, and at a glance at the case, we are forced to conclude that some serious organic lesion can alone account for the grave state before us.

This may be, I think, any one of the following: Spinal apoplexy, a tumor pressing upon the cord, spinal meningitis, congestion, or red softening.

The first we may venture to exclude, by the mere fact that the paralysis began to show itself on the 14th, and was not complete until the 20th. Had it been due to rupture of a blood-vessel and sudden effusion of blood on the cord, the paralysis would have been immediate. The second is improbable, from the extreme rarity of the affection, and because the prominent symptoms showed themselves in such a short period of time. Had a tumor been the cause, I think that a much more gradual loss of power would have occurred.

None of the ordinary symptoms of meningitis are present, such as rigidity of the muscles of the back, intense pain on moving the trunk, &c., and thus we come down to congestion or softening as causes of the condition before us.

These are the chief differential signs between congestion and softening. In the first, patients are more paralyzed upon first rising from bed, than they are after moving around. There is a great amount of formication and numbness, (which are and have been absent here.) There is but little pain along the spine. The characteristics of the second are, alkalinity of urine, (absent here,) pain upon pressure over spine, and a band or constriction felt around the body. All the symptoms of neither of these states are present, but from the evidence before us, I strongly suspect that acute softening, commencing at the upper part of the cord and extending downward, is the moving cause of the trouble we behold.

Prognosis.—I need hardly tell you that our patient is in a most critical state; nothing can be done to cause his forces to rally, and we may safely predict that before 48 hours have passed the scene will close.

February 2nd.—White died on the night of February 1st; a post-mortem examination was made on the 2d, and I read you a *résumé* of a report of it by Dr. Lyman. Lungs adherent, congested, and tuberculous—the middle lobe of the right being almost solid with tubercle. There was roughness and insufficiency of the mitral valves.

The spinal column being carefully opened, a small tumor the size of a small hazel-nut popped out. This had been slightly adherent to the membranes. The brain was not examined.

Here, again, we were in error in supposing acute softening to exist. In spite of the absence of alkalinity of urine, the band around the body, persistent muscular spasm, &c., &c., we preferred to risk

this diagnosis rather than attribute the symptoms to so rare a pathological state as that which is now developed. But you perceive we were mistaken. I trust that this error may give us aid in ascertaining the truth in the next case of similar character which presents itself, though I confess that were exactly the counterpart of this to present itself, I should feel inclined to draw the same deduction from the symptoms presented. In other words, I do not know how a case of tumor developing paralysis so very rapidly (the patient being free from it before) could be differentiated from red softening.

Translations from the German. By C. A. HARTMANN, M.D., of Cleveland, Ohio.

IV. *Arthroxerosis and Hydrops of the Knee-Joint.* By Prof. FR. SCHUH.

Hydrops of the knee-joint, resulting from congestion or slight inflammation of the synovial membrane, is easily removed by quietude, cold applications, and resorbents, (muriate of ammonia in solution, mercurial and iodine ointment, gum-ammoniac boiled to a paste with vinegar of squills, or pressure by bandages;) in obstinate cases, by artificial suppuration. But the case is quite different when the synovial membrane has become thickened, and covered with vegetations of a cellular, cartilaginous, osseous, or mixed character. Although quite frequent, this form is not well known. It resists obstinately all the remedies enumerated.

Symptoms.—The exuberant appearance of areolar tissue in the joint is frequently preceded, for several weeks, by violent pains in the joint, or over the whole extremity. As long as the new formations are small, moderate movements of the joint are not prevented; there is only an increase in temperature and sensibility, when they are too long continued. Longer excrescences are apt to get between the articular surfaces, causing sudden pain, and suspending all motion, until they are released. Frequently such formations can be felt as movable, irregular strings by the sides of, or above the patella, even if there be considerable accumulation of fluids in the joint. Cartilaginous or osseous growths produce, during movements, a dry, rattling noise, occasionally with slight interrupted concussions. By-and-by the roughness of the bones becomes manifest to the examining finger. With the growth of the excrescences, the serviceableness of the joint is more and more impaired. Abnormal mobility in different direc-

tions, or false anchylosis, may follow. In either case there is limping, which increases when the extremity is shortened by resorption. Then the crucial ligaments and semilunar cartilages atrophy, the knee turns inward, or something like a subluxation happens.

The disease always runs on for several years. If the excrescences are soft, the joint may do for a moderate use, or even improve by resorption. Usually, however, repeated periods of irritation confine the patients to bed for a considerable time, and in one year the joint may be greatly malformed. Sclerosis once being completed, no further changes take place, except portions of an osseous excrescence be broken off and left free in the joint, or inflammation be induced by too great exertion of the suffering extremity.

The disease occurs in both sexes, but not previously to puberty. Aged patients are particularly apt to have hard excrescences. Causes: Everything resulting in a lasting congestion—injuries, for instance; but more frequently cold and rheumatism. A connection with gout is not probable.

Treatment.—As long as symptoms of congestion or inflammation are present, long-continued cold applications. Later, the resorbents already mentioned; or, where they prove useless, and considerable accumulation is present, puncture and injection of tincture of iodine, with from one to four parts of water and a little iodide of potassium. An elevated position and ice-applications afterwards.

Some enlargement of the knee always remains.—*(Zeitschr. Gesellsch. d. Aerzte zu Wien.)*

V. *Studies on Twins.* By Prof. I. SPAETH, of Vienna.

Among 14,880 deliveries in the hospitals of Vienna, occurred 185 twin-births, or one in eight. In two cases two amnions presented themselves. Three times the after-birth of the first child came away before the other was born. Particular attention was paid to the following points:

1. *Condition of the After-Birth.*—One hundred and twenty-six cases examined. Two separate placentæ, two chorions, and two amnions, in 49; united placentæ, two chorions, two amnions, in 46; united placentæ, one chorion, two amnions, in 28; united placentæ, one chorion, and one amnion, in 2. United placentæ retained, very frequently, traces of a line of demarcation, with double as well as simple chorion. There was never any indication that a single chorion had been formed by the union of two. Where two chorions existed, the vessels of the two cords had no communication with each other;

in all cases with one amnion, and more than one-half of those with one chorion, these vessels formed superficial but well-marked anastomoses from one side to the other: either between the veins alone, or between the arteries also. In one case the artery of the one fœtus anastomosed with a vein of the other. In such cases the second child may bleed to death through the cord of the first-born, if that cord is not tied.

2. *Sexual Condition of the Children.*—In less than one-third of all cases the children were of different sexes. Twins with united placentæ and united chorion are always of the same sex; under other conditions they may be so.

3. *Degree of Development in Twins born alive.*—In 108 of 176 cases premature delivery took place; in three, abortion about the sixth month; only 62 pairs reaching the full term. Usually, the children were found of unequal size. The first-born was the largest, 29 times in 62; 13 times in 28 mature, and 16 times in 34 premature twins.

The largest pair measured $13\frac{1}{2}$ and $13\frac{3}{4}$ inches around the head, 19 and $19\frac{1}{4}$ inches in length; the smallest mature pair, $11\frac{1}{4}$ and $12\frac{3}{4}$ inches around the head, $16\frac{1}{4}$ and 18 inches in length—proving that twins may reach the normal size of single children born at full term.

4. *Vital Relations of the Children.*—In 176 out of 185 cases, both children were born alive; in 8 cases, one was dead; in one instance, both. In 4 cases of the 8 with a dead child, no cause of death could be ascertained; in 3 of the remaining 4, the fœtus died from torsion of the cord, and one in consequence of fibrinous deposits in the placenta.

5. *Development of the Ovum.*—In a case with united placentæ, but two chorions, the uterine surface of one placenta was covered with numerous calcareous concretions; the other, normal. Several other cases exhibited a similar condition in regard to fibrinous exudations. Of two embryos enveloped in one chorion, one perished about the fifth month, in consequence of induration of the placenta, while the other continued in its normal development. Such differences occur even where the two umbilical arteries communicate with each other. In one birth, the first-born child was well developed and living; the head of its mate had to be perforated, on account of hydrocephalus, and the body showed extensive malformation: double hare-lip, cleft palate, atrophied eyeballs, club-feet; one radius and thumb, as well as stomach, and spleen deficient, &c.; still these two children had a united placenta, a common chorion, and anastomosing umbilical veins. With numerous anastomoses and one chorion, one fœtus may perish

without impediment to the normal development of the other. Credé seems, therefore, to be correct in saying: "Each fœtus has a separate existence, independent from that of its mate."

6. *Superfecundation and Superfœtation.*—It is now pretty generally admitted that gestation with twins arises from the fecundation of either two ovules, (from one or two Graafian follicles, or may be even from the two ovaries,) or of one ovule with two germs. In the latter case only one chorion (though occasionally two amnions) will be formed, the placentæ unite, and the children are of the same sex. Impregnation of two ovules results in the formation of two sets of membranes; the placentæ uniting, if the ovules are located near to each other in the womb. In either case, one copulation may be sufficient. It must be admitted, however, that two ova, with separate chorions, may possibly have been fecundated at different times. There is no proof that this causes the differing size of twins, as those evidently developed from two germs in one ovule present in this regard as much difference as the others.—(*Zeitschr. d. Gesellsch. d. Aertze zu Wien.*)

VI. *Apparatus for Fractures of the Leg.* By Dr. F. W. LORINSER, of Vienna.

All the disadvantages usually met with in the treatment of these fractures may be avoided by the use of a suspension-board, arranged as follows: Two boards, placed over each other, are so connected by screws that the inclination of the upper one can be altered. A soft cushion, placed on the upper board, serves to support the leg, in case the same is not kept entirely suspended. Quadrangular holes surrounding this cushion receive six wooden pillars. The two lower ones, connected by a transverse bar, so as to furnish a support to the sole of the foot, have strong iron hooks on their tops, which hooks receive the ends of a lace-work bandage applied around the foot, thus keeping the heel suspended, and preventing decubitus The other pillars support two iron hoops, which keep the extremity from contact with the bed-clothes. Laterally, strong iron bars are fastened, by means of screws, to all the pillars; to them bandages may be tied, either suspending the whole leg—which is so often desirable—or effecting lateral traction. The whole apparatus can be suspended by means of hooks attached to the four angles.—(*Wiener Medizinische Wochenschrift.*)

Transactions of the Medical Society of the County of Kings.

MAY, 1861.

Dr. BELL presented the following abstract of

A Case of Catalepsy.

E. W., aged 26; born in England; gas-fitter. Entered the Brooklyn City Hospital 8th March, 1860. For several years he had been very intemperate, but since a slight attack of delirium tremens three months before, liquor had been kept from him. During this interval, however, he had several times drank burning fluid; once a pint at a single draught. His brother stated that he was subject to convulsions several times a day, latterly, and, until since he ceased speaking, he complained of seeing frightful objects; he also complained of severe pain of the epigastrium. For the last three days he has wholly refused food and drink, for fear of being poisoned, and now appears to be completely insensible to all inquiries. Is either incapable of the effort, or obstinately refuses to speak. Light pressure over the solar plexus throws the whole muscular system into violent spasmodic action, simulating epileptic convulsions. Respiration easy; heart's action feeble, but regular; pulse 64. Temperature only a little below par.

On making the effort, found it impossible to make him swallow anything; therefore ordered eight ounces of beef-tea, with half an ounce of whiskey, to be injected into the rectum every two hours. He remained for the most part quiet, but seemed to sleep but little, consequently paregoric was substituted for the whiskey. The "convulsions" rarely occurred, unless he was touched—especially if touched suddenly; at such times there was a convulsive tremor of his whole system, but without distortion of his features. Yet he would allow himself to be placed on the easy-chair, have a dejection every day or two, and pass his urine without difficulty and without resistance. This state of things continued about two weeks; meanwhile he had several times seized the bowl of beef-tea or pitcher of water, and ravenously gulped down its contents; a quart at a time. Thus he continued without material variation for eighteen days, when all of a sudden he sprang up over the foot of his bed and made a dash at the window as if to escape. The nurse quickly arrested his movement, and had no difficulty in returning him to his bed. Six hours afterwards he was *rigid* from head to foot. His arm or leg, if raised, for which it required considerable force, remained as left; and he could be raised by his

head to a perpendicular without the action of any of his muscles. He was totally insensible to pain, and took no notice of anything. He thus continued three days; during which time the beef-tea injections returned in an apparently normal state; his urine dribbled from him in bed. He now became more and more relaxed; gradually sank, and died April 2d, seven days after complete catalepsy.

Autopsy, thirteen hours after death. Stomach contracted to one-fourth its natural size Other viscera healthy. Brain unusually vascular; and on the sides of the fissure, between the two hemispheres, there were several clots of lymph, two or three lines in thickness. The arachnoid was, in several places, twice its normal thickness. Each lateral ventricle contained an ounce of fluid.

Dr. HALLETT reported a case of *spreading* carbuncle, in a lady about 35 years of age; the carbuncle being on the back of the neck, and gradually extending into the surrounding tissue, which is of a dark-red color; the marginal inflammation appearing to be more destructive in its tendency than is usual in this disease. The doctor also remarked, that he had noticed an unusual prevalence of carbuncle and boils, recently; and he had reason to think that other practitioners had observed the same.

In the treatment of the particular case referred to, deep and repeated scarifications had not been followed by their usual benefit. The disease is still extending, though it has been under treatment ten days, and the system of the patient is now much depressed.

Dr. ENOS stated, that lately he has been in the habit of relying more on the constitutional treatment and the application of poultice in carbuncle, than on scarification. He was first induced to a reliance on this course of management by a patient who was unfortunately afflicted with a succession of carbuncles, and who, on account of the excessive pain of scarification, finally refused to have it performed. Those which occurred subsequently, and which were treated without scarification, certainly did quite as well, if not better, than those which had been freely scarified.

Dr. BELL mentioned, in relation to this subject, that he had recently had (in March) a case of malignant pustule that resulted in death. It, with two other cases that had occurred in his practice, had served to call his earnest attention to this disease, and that he would, at a future time, offer a paper on the subject. On examination, thus far, he had been particularly struck with the circumstance that, although all the cases he had heard of in this country were evidently sporadic, that, nevertheless, they had all occurred since the prevalence of epi-

zootic diseases among our domestic animals. And there was good reason to think that malignant pustule in this country agreed with that described by French authors, and was always due to animal poison.

Dr. ENOS reported

A Case of Labor complicated with Diphtheria.

The patient had been affected with diphtheria about two weeks, and was convalescing, when, her full period of utero-gestation being complete, labor supervened, and terminated well. The patient had a good "getting-up," and that which he had feared would prove a formidable complication on account of its apparent analogy to scarlatina, proved to be of little consequence. Traceable to this case, however, he had noticed some evidence of the contagiousness of diphtheria; a child having visited the house, though not the room of the patient, was about one week afterwards taken with the disease. In the same family with the child there were seven other persons, and four of them had diphtheria. The first case in the family—the child, which seemed to have taken it from the lying-in woman—was somewhat remarkable. It continued fifteen days, and the membrane finally came off from the fauces circumferentially, leaving a healthy mucous membrane. From the nares the membrane was thrown off earlier, and in the usual manner, leaving a tender surface. The other four cases were mild, and presented nothing unusual.

It was the general experience of the members of the section present, that diphtheria continues to prevail, though perhaps less extensively, and certainly less fatally, than it did a few months ago.

Dr. HAWLEY continued the history of his

Case of Paralysis.

He said that the santonine which he was giving last month had seemed to produce no effect whatever, and that he had returned for a time to the strychnia and iron prescription; yet the peculiar attacks, as of paralysis, had continued at irregular intervals. So, also, the convulsive fits, and the chill-and-fever symptoms. The Dr. stated that he did not think the account given of his report at the last meeting conveyed a sufficiently forcible idea of the sudden and complete changes in the character of the symptoms, and the very peculiar manner in which the patient was handled. As, for instance, the patient would one day be very bad, completely prostrated and helpless, and another time would be at the door to let the doctor in; and again he would be playing in the streets with other children, and in a little

time more be found at home creeping upon the floor, almost entirely helpless. One night the father came for the doctor, stating that the boy was very bad—could not walk at all; and when he got home he found him carrying a baby of two years about the floor. Since last meeting the doctor had tried electricity, with the usual unsatisfactory result.

In answer to questions, Dr. H. said the patient had tenderness of the spine, but slight irritation with croton oil had seemed to remove it.

The Dr. also stated that the patient had had a return at one time of the symptoms which he had before supposed might have been the result of the arsenical solution. Dr. HAWLEY thinks at present the boy is somewhat improved, yet he has lost something of the brightness of his eye.

Always after these attacks, in whatever form, the patient calls for food, and eats voraciously.

Dr. HAWLEY also gave a brief account of an operation performed by him for *Imperforate Vagina*. The patient was a little girl, two years of age The membrane extended entirely from labia to labia, wholly closing the vagina, and was about a quarter of an inch in thickness. He divided it with the scalpel, and kept the parts separate by the daily introduction of lint. The parts healed kindly in a few days.

Dr. O. H. SMITH gave an account of three cases of serous effusion into the pleura and pericardii, all following closely upon each other, and all rapidly and singularly fatal.

The first was that of a young girl, 15 years of age. The doctor, on first visiting the patient, found that she had been prescribed for by another physician. She complained of some pain in the chest, and other symptoms, as of a slight cold. He gave very little medicine. The next night was sent for in haste; the girl had been taken suddenly with severe oppression about the chest, great difficulty of breathing, and other evident symptoms of pleuritic effusion. Patient grew rapidly worse, and died that night. Made a post-mortem examination, and found at least a quart of fluid in the left pleural cavity, and a considerable amount in the pericardium. No apparent inflammation.

The second patient was a young married man. Dr. SMITH said: About three weeks ago he called to see me, complaining of a slight cough and some little bronchial difficulty. Gave a cathartic, with small doses of tartrate of antimony, and in a few days he called again, when I found some dullness in right chest, lower part; prescribed

another cathartic and a stimulating diuretic. After a few days he came again, when I found that he had effusion into both chests; I gave a large calomel purge. Two days from this I was sent for, and found the patient greatly distressed; the dyspnœa very great in any position, and wholly impossible for the patient to lie down. Gave iodide of potassium and colchicum; next day found the patient still worse; greater dyspnœa, and pain in the region of the heart; prescribed as before, together with calomel, jalap, squills, &c., and applied a blister. In two days the patient died.

The autopsy revealed large effusions, three to four quarts, in the pleural cavities, and from six to eight ounces in the pericardium, together with some *recent* pneumonia, but no redness, false membrane, adhesions, or other symptoms of inflammation in the pleura or pericardium, with the exception of the serous effusions. The right ventricle contained a large clot, partially organized; a portion of the clot was white, firm, and elastic; a less firm and a darker portion was found extending through the semilunar valves to the artery.

The third patient of the kind, a Mr. C., was a man of middle age; has heretofore been pretty healthy, with the exception of some rheumatic gout. Was called, and found him in this not unusual condition, but in a little time he began to have a cough, though not severe, and he seemed to have no cardiac or other alarming difficulty; for some days complained of shortness of breath when he attempted to lie down. Yesterday found him pretty comfortable, but not so well as I expected; at 10 o'clock he went to bed, and soon had an attack of dyspnœa and suffocation, and *died* in a few minutes.

Case reported by Dr. J. C. Johnson.

An interesting Case of Death from Interruption of the Functions of the Nerves of Respiration came under my observation in a patient of Dr. Marvin. Mr. S., a strong, vigorous American, 38 years of age, of short neck and full habit, was taken to a station-house in New York about six o'clock, P. M., on Saturday, October 14th, upon the supposition that he was intoxicated, he having fallen on Broadway while walking. Prior to the panic of 1857 he had been a strictly temperate man, a partner in an extensive tailoring establishment. In that year the firm failed, and Mr. S. seemed to lose all ambition, and instead of attempting to better his fortunes, commenced drinking, and became exceedingly intemperate. It is not, therefore, improbable that he was under the influence of liquor when taken to the station-house. He remained locked up the whole of that night and the fore-

noon of the next day. Dr. Marvin saw him at his house about two o'clock, P. M. At that time he was fully conscious; complained of a little fullness in his head. The lower extremities were completely paralyzed, both in sensation and motion. There was partial paralysis of sensation and motion in the arms. The flexors had, however, more power than the extensors of the forearm. If his arms were laid beside him, as he lay on his back, he could with considerable difficulty raise them upon his breast, but could not again extend them so as to place them by his side. About seven o'clock that evening I saw him. At that time he was perfectly conscious, and inclined to be witty as a catheter was introduced. His pulse was 68, and rather full. He was complaining of great pain between his shoulders, and wished the pillows arranged so that he could rest more easily. I raised him in bed, when the pain was so much increased that it was necessary to return him immediately to his former position. His respiration was also increased by the movement—before it had been 16 per minute. There was no ecchymosis, and no indication of any violence to the neck, and nothing to attract attention to any particular point, except the intense pain in the upper dorsal vertebra, which he had desired to have alleviated by the change of position.

Attempts were made, by tickling the soles of the feet, by forcibly bending the great-toe, and by pricking the limbs, to excite reflex action, but they were unsuccessful. He complained of partial numbness, and a pricking sensation in his arms and hands. There was no paralysis of the tongue; he could at will protrude it in any direction —either to the right or left, or directly outward. The pupil was natural.

The treatment, as directed by Dr. Marvin, was: Warmth to the extremities; a turpentine enema; active cathartic, and a blister, six inches in length by two inches, over the spine, at the point of pain.

The next day he remained in about the same condition as before. Had not slept at all during the night. The turpentine enema was repeated. There had been an unusual secretion of urine from seven P. M. to nine A. M.—over three pints—and about the same amount by 8 P. M.

Tuesday morning, he had lost entirely the power of his hands. He did not complain of any numbness in his arms, and, with the exception of being able to shrug his shoulders slightly, there was neither sensation nor motion of any portion of his upper extremities. There was some little difficulty in the use of his lips; in attempting to

drink, his lips could not grasp the tumbler, and the water would run down his neck. The bowels were enormously distended with flatus. This had been heretofore relieved by the turpentine enema, but now it was so extensive that a rectum-tube was introduced, and by pressure on the abdomen, quite a large amount of wind passed. The quantity of urine drawn off during the twenty-four hours, as nearly as could be estimated, was three quarts. In the evening, as the catheter was about being introduced, I was informed that it was not necessary, as, since the introduction in the morning, he had made water freely. The catheter was, however, introduced, and the bladder was found distended. There had been a dribbling from an overdistended bladder during the latter part of the day, notwithstanding the bladder had been emptied in the morning. The urine had an ammoniacal smell, and the last that passed was thick, and of a dark-brown color.

The patient remained in much the same condition till Friday night. The quantity of urine was above the normal amount, and the enormous distention of the abdomen continued. About eight o'clock Friday evening, when I saw him, his mind was perfectly clear, and he spoke quite wittily. His respiration was considerably increased, and he desired fresh air. During the night his respiration continued to quicken, and he experienced considerable distress. In the morning the difficulty of respiration had increased so much as to alarm the friends. The patient commenced calling for the doctor, but before we arrived he had expired, asphyxiated. There was not the slightest unconsciousness from the time the patient came under professional observation till the time of his decease. There was no priapism after he was brought to the house; whether anything of the kind occurred at the station-house, could not be ascertained.

Earnest endeavors to have an autopsy were made, but the friends would not allow it. This was much to be regretted, as the case was probably one of those rare cases of spinal apoplexy similar to that detailed by Abercrombie and Curling. I do not think the case could have been a fracture of the spinous processes of the vertebra, as there was no ecchymosis at any time perceptible. There was no swelling of the neck, no departure from the natural outline of the neck; nor was any crepitus observed. Had there been either of these present, they could hardly have escaped observation during a week's attendance on the case, and the daily observation of the blister on that portion of the neck. There could have been no lesion of the brain, as there was no unconsciousness during the progress of the

case. The paralysis was equal on both sides, and commenced in the lower extremities, gradually extending up the body, till death was caused from asphyxia, from pressure on the phrenic nerve.

The most probable pathology of the case is, that there was an extravasation of blood about the junction of the cervical and dorsal vertebræ, as shown by the entire paralysis of the lower extremities, bladder, and bowels, and the slight paralysis of arms. As the extravasation continued, the portion of the cord from which the brachial nerves originate was compressed, as shown by the supervening complete paralysis of the arms, and the death of the patient by asphyxia, from the extravasation extending up the cord till the phrenic nerve was compressed.

Our standard authorities have very little to say upon these cases. Watson says: "Spinal hæmorrhage, it is well known, does occasionally occur, but the symptoms to which it gives rise are by no means peculiar or distinctive. They consist of *pain* in some part of the spine, paralysis, convulsions."

Wood details symptoms similar to these under the head of spinal meningitis, and gives the lesions resulting from inflammation of the meninges as the results of post-mortem investigations.

The most complete description that I have been able to find of this disease is in Copland's Medical Dictionary.

He gives the following lesions: Hæmorrhage may take place into the external sac of the arachnoid, between the dura mater and arachnoid; or into the internal sac of the arachnoid; or between the pia mater and the arachnoid. When thus seated, the hæmorrhagic effusion has been called hæmatorrhacis by Ollivier. When hæmorrhage occurs in the structure of the cord, it has been termed *hæmatomyélie* by this writer. The causes of spinal apoplexy are chiefly injuries sustained on the spine, especially blows, falls, fractures, concussions. Spontaneous hæmorrhage in either of the situations just specified, or between the dura mater and the walls of the vertebral canal, is rarely met with, and, when observed, is to be attributed chiefly to pre-existing disease of the vessels; extreme exertion or efforts of any kind, or unusual demands made upon the circulation of the cord, or whatever interrupts the return of blood from or through the vertebral sinuses, being the more immediate exciting causes.

The symptoms of spinal apoplexy have been imperfectly observed, owing to the rarity of the disease, and to the early progress of it having passed unobserved by competent persons. The most frequent phenomena characterizing the attack are pain, sudden and acute, in the

region of the spine, corresponding with the seat of extravasation, convulsion, and paralysis.

The following case, reported by Mr. Curling in the third report of the Proceedings of the Pathological Society of London, is related by Dr. Copland:

A gentleman, aged 44, a stout man, of active habits, but a free liver, and subject to the gout, had just got into bed about 11 P. M., when he was suddenly seized with spasm in the stomach, and found that he had lost all sensation and power of motion in the lower half of his body. An hour after this seizure, the patient was found shivering in bed by Mr. Curling, with complete paraplegia of the whole of the body below the third ribs, and strong priapism. He had perfect use of the arms, but complained of pain about the wrists. No excito-motory actions were producible. His mind was quite clear. After the circulation was restored, the treatment consisted chiefly of cupping between the shoulders; a blister to the nape of the neck; purgatives to unload the bowels, frequent doses of calomel, and regular relief of the bladder. The priapism subsided in about twenty-four hours. There was no extension of the paralysis except numbness of the hands, and at last, imperfect power of using them.

During the first eighteen hours after the attack scarcely any urine was secreted, and it subsequently continued scanty in amount. The breathing gradually became embarrassed and difficult, and the patient died the fourth day after the seizure, his intellect being unaffected until within a few hours of his death.

On examination, the muscles of the back were much loaded with blood. No fluid escaped on opening the theca vertebralis, the head being in a depending position. The vessels on the surface of the cord were very congested. An incision was made along the front of the medulla, commencing at a part corresponding with the third cervical vertebra, and terminating at the last dorsal. There were two small clots of blood, amounting together to about a drachm, in the interior of the medulla, occupying about an inch and a half in extent, and situated between the origin of the second and third pair of dorsal nerves. The substance of the cord around the clots was somewhat soft. The medulla was more or less infiltrated, and stained with blood from the site of the clots, as high as the third cervical vertebra, and downward as low as the last dorsal.

The indications of treatment, as mentioned by Dr. Copland, are:

1st. To arrest and prevent the recurrence of the effusion.

2d. To favor the absorption of the effused blood.

3d. To keep within due bounds the vascular reaction or irritation accompanying or following upon the process of reparation in the seat of injury. For these purposes, he recommends blood-letting, chiefly by cupping-glasses along the spine, according to the pulse and habit of body of the patient; terebinthinate epithems or embrocations along the spine; the facial or lateral recumbent posture; perfect rest, attention to the secretions and excretions, frequent recourse to the catheter if it should be at all required, and the earliest and utmost endeavors to prevent bed-sores, by recourse to air-pillows, the hydrostatic bed, &c.

Dr. HALLETT reported the following case of

Inguinal Hernia.

M. McCarty, æt. 22, has been the subject of inguinal hernia of the left side for several years, but did not consider it of sufficient importance to take the precaution of wearing a truss. Occasionally it would come down slightly, but was always easily reduced, without assistance.

On the night of the 10th of April I was summoned to attend him in haste. I found him suffering great agony from the hernia, which had become strangulated. The tumor was extremely tense, and extended into the scrotum. It had been in this position for about eighteen hours, during most of which time the patient pursued his usual occupation of grocer's clerk. After making a few slight attempts at reduction with the taxis, which proved unsuccessful, I requested that Dr. William Gilfillan be called in to assist me. Upon his arrival we immediately put the patient under the influence of chloroform. And being now placed in the usual position, with the knees bent, we again attempted its reduction. But the stricture being very rigid, and the gut filled with fæculent matter, we were unable to return it, after the most patient and persevering effort. Considering that any further manipulation of the tumor might endanger the patient's life, we began to feel that an operation would be the only means of affording him relief; when calling to mind Dr. Jessop's case, reported in the January number of the *Lancet*, in which he succeeded in reducing a strangulated hernia after all the usual means had failed to accomplish it, by a method first suggested by Hesselbach, but then claimed to be a new method—that is, by the means of an assistant raising the patient by the knees from the bed, at an angle of about forty-five degrees—thus taking off the downward pressure of the viscera, and making their

weight to fall in the opposite direction; by this means causing a dragging upon the strictured intestine from within, in the direction upward and backward. We now resorted to this method by the means of two assistants, who held the patient in the position indicated, we all the while gently manipulating the tumor, and making attempts at its reduction, occasionally making upward pressure upon the abdomen.

After a time we had the gratification of feeling that the tension was becoming gradually less, indicating that the semi-fluid contents of the sac were gravitating into the abdominal cavity. By persevering a little longer, we had the gratification of returning the intestine to its natural position. It is the opinion of Dr. Gilfillan, as well as myself, that it would have been utterly impossible to have reduced this hernia by the ordinary methods employed, as the strictured gut contained fæcal matter, and scarcely any gas, was very firm and unyielding, and the stricture at the neck very small and rigid.

Dr. HALLETT's paper on Strangulated Hernia being under discussion, Dr. WILLIAM GILFILLAN stated that the hernia described by Dr. HALLETT was as large as a closed fist. In this case a considerable amount of force was applied, in opposition to the usual surgical rule, which was, if the strangulation was recent, more force might be applied than if it was old. The reason of this was, that the bowel becomes softened, and more easily gives way. Dr. GILFILLAN had seen, when a student, a case which impressed on him the importance of this rule. It was a strangulated hernia, which was reduced after some time, and yet the patient died. The autopsy revealed the fact that the intestine, softened with a tendency to gangrene, had been perforated in three places, corresponding to the fingers of the surgeon who had reduced it. Dr. Jessop claims this method as his own. Dr. Gilfillan had seen Dr. Joseph M. Dowell, of St. Louis, reduce a strangulated scrotal hernia in a negro, by raising the negro by his heels, and pouring cold water upon his scrotum. This hernia was reduced by emptying the tumor of its fluid contents. There was no gas, and no gurgling sound.

Dr. HART said that some time ago he had a patient with a scrotal hernia, strangulated for ten hours. Dr. H. expected an operation would be inevitable. The pain was intense, and he gave him 2 grs. of opium an hour; when the man had taken 6 grs. the hernia returned of its own accord. Dr. Chapman, many years ago, published a paper on the use of opium in large quantities in strangulated hernia,

and the ease with which they could be reduced when the pain was relieved. Dr. Hart advised the treatment should be tried.

Dr. ENOS exhibited a cyst in the cerebellum, removed from a man 45 years of age. Five years ago the man consulted the doctor. At that time he complained of difficulty in writing. There was no paralysis; there was no loss of sensation, or any of the precursors of paralysis; his mental faculties had been good; finally he became deaf, so that he had to give up his situation. Then there came a weakness in his right limb, so that he had to walk with his limbs straddled wide apart. A few months afterwards he complained of pain in the back of the ear so severe that blisters were applied. Then followed difficulty in reading; he had to read large print. After two years, Dr. Enos lost sight of him. He could give no very definite history of him for the last three years; he understood that he improved so as to walk out. A few nights ago Dr. Enos was called to see him, but when he arrived the man was dead.

Post-mortem.—The whole body was swollen and waxy, presenting somewhat the appearance it has in renal disease. Almost the whole of the right cerebellum was occupied by a cyst. Near the crus cerebelli was a hard portion, probably cancerous; more probably cancerous than tubercular. The cyst pressed upon the tubercula quadrigemina, the seat of vision, according to Mons. Flourens. The uncertain motion of the patient was readily explained, as the cerebellum is the seat of motion.

QUARTERLY REPORTS ON MEDICAL PROGRESS.

REPORT ON MATERIA MEDICA AND THERAPEUTICS.

By DR. L. EISBERG.

11. *Eupatorium Cannabinum against Asiatic Cholera.* By Dr. VAN DROMME. (Presse Méd.; Schmidt's Jahrbücher, No. 2, 1862.)
12. *Root of Sarracenia Purpurea a Remedy for Small-Pox.* By Surgeon HERBERT CHALMERS MILES. (London Epidemiological Society; Med. Times and Gazette; Lancet, [Am. Ed., Feb., 1862,] etc.)
13. *Bark of Pomegranate-Root as a Remedy in Tænia Solium.* By HENRY R. TILTON, M.D., U. S. A. (Medical and Surgical Reporter, February 15, 22, 1862.)
14. *On Pinguoleum Æsculi Hippocastani.* By M. STILESEN. (Forhandl. ved. de Scandinav. Naturforskeres 8 Möde i Kjöbenhavn, p. 354.)
15. *On the Medical Employment of Croton Oil.* By M. JORET. (Bull. de Thérap.; Gazette Hebdomadaire de Médecine et de Chirurgie, Jan. 24, 1862.)

16. *Employment of Magnesia to insure the Assimilation of Cod-Liver Oil.* By M. DANNECY. (Bulletin Général de Thérapeutique Médicale et Chirurgicale, Vol. 61, p. 545; L'Union Médicale, Dec. 24, 1861; etc.)
17. *Wine in Large Doses a Remedy for Hæmorrhages.* By Dr. FAURE. (Gazette des Hôpitaux, No. 120, September, 1861.)
18. *Chloracetization: a New Means of Producing Local Anæsthesia.* M FOURNIE. (Gazette Médicale de Paris, No. 51, Dec. 21, 1861.)
19. *On Doses of Opium in Delirium Tremens.* By Prof. Dr. WM. ROSER. (Archiv. der Heilkunde, 1861, p. 191.)
20. *On Solidified Creosote.* By M. STANISLAS MARTIN. (Bulletin Gén. de Thérapeutique Médicale et Chirurgicale, Dec. 15, 1861.)
21. *The External Use of Glycerine as a Sudorific.* By JAMES JONES, M.D. (London Lancet, [Am. Edition,] February, 1862.)
22. *The Iced Bath in Delirium Tremens.* By LEWIS A. SAYRE, M.D. (American Medical Times, March 8, 1862.)
23. *The Pulverization of Mineral Waters, by M. Sales-Girons.* By M. POGGIALE. (Gazette Médicale de Paris, No. 2, 1862.)
24. *Sulphuric Acid in Diarrhœa.* By WILLIAM GRIFFITH. (London Medical Times and Gazette, Jan. 18, 1862.)
25. *On Mercury and Mercurialism.* By Dr. ROBERT OVERBECK. (Mercur und Syphilis. Physiologisch-Chemische and Pathologische Untersuchungen über das Quecksilber und über die Quecksilberkrankheiten. 8vo, pp. 349. Berlin: August Hirschwald, 1861; Review thereof, London Medical Times and Gazette, January 18, 1862.)
26. *On the Citro-Ammoniacal Pyrophosphate of Iron.* By E. N. CHAPMAN, A.M., M.D. (Boston Medical and Surgical Journal, February 6, 1862.)
27. *The Medicinal Properties of the Alkaline Hypophosphites.* By JOHN TAYLOR, M.R.C.S. (London Lancet, Dec. 4, 1861; Am. Edition, February, 1862.)
28. *On the Iodide and the Oxido-Iodide of Antimony.* By Dr. VAN DEN CORPUT. (Bulletin Gén. de Thérap., January 30, 1862.)
29. *Arseniate of Caféine and Tanno-Arsenious Acid, two new Arsenical Preparations recommended as Anti-Periodics.* By Prof. Dr. GASTINEL, of Cairo. (Report of Dr. Schnepp to the Institute of Egypt; Gazette des Hôpitaux, No. 8, Jan. 21, 1862.)
30. *A Substitute for Sutures.* By H. TALBOT HIGGINSON, Esq. (Dublin Medical Press, January 29, 1862.)

11. Julius Clarus, whom we esteem as the best reporter on Materia Medica that we know of, informs us that Dr. Van Dromme claims to have obtained favorable results with *Eupatorium cannabinum* in the cholera epidemic of Belgium in 1859. An ounce—what part of the plant is not stated—was boiled with 1½ litre [about 3 pints] of vinegar down to 1 litre; one-fifth as much Syrupus Belladonnæ was added to the decoction; and of this mixture, one to two table-spoonfuls an hour, the patient received after every attack of vomiting. The doses were given less often as soon as the cyanosis subsided, and entirely suspended as soon as bilious stools appeared. Besides, warm or cold water

(either acidulated or not) internally, washing with vinegar and water, cloths wet with vinegar and water to the abdomen, good ventilation, and not too warm covering of the patient, were employed. In consequence of this treatment, after two or three hours the cyanosis is said to gradually yield, and the warmth of body and pulse slowly to return, while vomiting and rice-water discharges may continue (without further injury, as soon as the functions of the heart and respiration are carried on properly,) for some days longer. Of 32 patients so treated, 26 recovered.

12. At a recent meeting of the London Epidemiological Society, a communication on an "Indian Remedy of Small-Pox" was received and discussed. It was from the pen of Herbert Chalmers Miles, Surgeon Royal Artillery, Halifax, Nova Scotia; and we extract the following as his conclusions from the information which he seems to have been at some pains to gather from the Indians. The Society desired to have the anti-varioloid powers of the remedy tested in England.

(1.) In the case of an individual suspected to be under the influence of small-pox, but with no distinct eruption upon him, a large wine-glassful of an infusion of the root of the plant "Sarracenia purpurea," or pitcher-plant, (several specimens of which, including the root, were exhibited on the table,) is to be taken. The effect of this dose is to bring out the eruption. After a second and third dose, given at intervals of from four to six hours, the pustules subside, apparently losing their vitality. The patient feels better at the end of each dose, and, in the graphic expression of the *Micmac*, "knows there is great change within him at once." (2.) In a subject already covered with the eruption of small-pox in the early stage, a dose or two will dissipate the pustules and subdue the febrile symptoms; the urine, from being scanty and high-colored, becomes pale and abundant; whilst from the first dose the feelings of the patient assure him that "the medicine is killing the disease." Under the influence of the remedy, in three or four days the prominent features of the constitutional disturbance subside, although, as a precautionary measure, the sick person is kept in camp until the ninth day. No marks of the eruption (as regards pitting, &c.,) have been left in cases examined that were treated by the remedy. (3.) With regard to the medicine acting (as is believed by the Indians) in the way of a preventive in those exposed to the infection, it is curious to note that in the camps where the remedy has been used the people keep a

weak infusion of the plant constantly prepared, and take a dose occasionally during the day, so as to "keep the antidote in the blood."

13. A fluid extract of the bark of pomegranate-root is prepared as follows: "Let ℥ij. stand in Oj. of very strong alcohol for 14 days; filter; evaporate the alcohol, leaving the water of the alcohol combined with the active principles of the bark. This watery extract measures from f. ℥iv. to f. ℥vj., the quantity being governed by the strength of the alcohol." The treatment against tape-worm occupies less than twenty-four hours. "The patient takes a purge in the afternoon—either castor oil, salts, or any cathartic which the physician may select; he abstains from supper and breakfast, and then begins with the fluid extract, taking one-third of the whole quantity at a dose, which is to be repeated every hour and a half or two hours. This generally acts upon the bowels within a short time after the third dose is taken, bringing away the entire worm; if it should not act before twelve o'clock, a second purge is to be given." The latter seems seldom necessary. "Sometimes there is slight nausea, either from the medicine or the movements of the worm; this is promptly relieved by a tea-spoonful of vinegar, administered in cold water." Several cases of tape-worm successfully treated with pomegranate-root have recently been reported to the new *Dispensary Medical Society of New York.*

14. The oil of wild horse-chestnuts has several times, within the last few years, been brought forward as a very valuable remedy in rheumatic affections. We do not think it entitled to anything like the high encomiums that have been bestowed upon it, (especially in the advertisements of some London manufacturing house, which conceal the details of its preparation,) but yet worthy of a trial. Dr. Stilesen tells us he prepared it by having the chestnuts cut and dried, coarsely powdered, and digested with ether for about eight days. The whole mass was then pressed and filtered. The ether was then distilled, and about half the original quantity reobtained. The last traces of ether were evaporated with great difficulty, and the oil retained the odor of ether. On account of the large quantity of the ether required, the oil is pretty expensive. It is used by moistening a piece of flannel with it, and rubbing or applying morning and evening to parts affected. The skin becomes red, and a burning and tingling remains for some hours. The oil is probably identical in composition with croton oil, Stilesen thinks.

15. Dr. Joret regards the fears of physicians in the use of croton oil utterly unfounded. In his hands it has always been a remedy

without the slightest danger of unpleasant consequences, when prudently employed. He mixes it with oil of sweet almonds, to allow of smaller dosing, and administers it in small capsules in doses of a drop, half a drop, and quarter. As to its therapeutic applications, he offers nothing but what we think is well known, but calls on the profession to use it more frequently.

16. Many persons are unable to keep down cod-liver oil, returning it several hours after taking it, even when they have taken it at the beginning of a meal, and strange enough, only vomiting it after the digestion of the aliments has terminated. M. Dannecy having been consulted by many inconvenienced in this manner, and who yet swallowed the oil without any repugnance, recommended them to take after each dose from eight to ten grains of calcined magnesia, suspended in a small quantity of water. The success of the plan was most complete.

17. A previously healthy woman had suffered for fourteen days with extremely profuse bleeding from the oral cavity, together with asthma, constipation, and purpura hæmorrhagica. All available means having been tried without success, and death being imminent, alcoholic intoxication was induced and kept up, by giving every fifteen minutes a glass of old Bordeaux wine. On the next morning the bleeding had ceased, and other symptoms were also ameliorated. A chronic scorbutic condition of the gums continued for some time longer.

18. Dr. Fournié has submitted to the *Académie des Sciences* of Paris a new way of producing local anæsthesia, called by him chloracetization; and MM. Bernard, Velpeau, and Jobert were appointed a Committee to report on its value. If, says Fournié, in a room with a temperature above 17° Cent., [63° F.,] the orifice of a thin glass retort or flask containing equal parts of pure crystallizable acetic acid and chloroform, the mixture to about half fill the flask, be accurately applied to a healthy and clean skin, not deprived of epidermis, the flask constantly maintained at the temperature of the hand, a complete insensibility of the part to which it is applied and of some of the deeper parts will be obtained in five minutes, and after only a very slight sensation of pain.

The vapors of acetic acid and chloroform applied in the manner mentioned, adjoining parts which it is not intended to render insensible being protected by diachylon plaster, may be employed as anæsthetics in all the operations of minor surgery which principally concern the skin, in many of major surgery, and in general in all cases

where general anæsthesia is contra-indicated, or when the patient, fearful of the dangers of inhalation, declines to avail himself of its benefits; and this method of chloracetization Fournié submits as the most certain, easiest, most simple and economic, and best local anæsthetic.

19. Prof. Roser, of Marburg, is of opinion that patients with delirium tremens sometimes die on account of the timidity of physicians in prescribing opium in large doses, from fear of poisoning. The patient may have taken 3, 4, or 6 grains, and is still getting worse and worse. The vital indication is to quiet the delirium; and this is to be done by energetic doses only. He advises at once 2 grains of morphia, and one grain more, hourly, until the pupils are strongly contracted, and the respirations descend to ten, eight, or even six in a minute. The appearance of a patient so treated, he admits, is alarming, but in such deep narcotizing lies his safety. He obtains a deep sleep, and awakes conscious; and if there is a relapse, this is easily vanquished. [Apropos to delirium tremens, we desire to add here, that since the issue of the MONTHLY, in which Dr. Smith's experience with tincture of ergot in this condition was reported, we have used experimentally the fluid extract of ergot in a very grave case of *mania-à-potu*, with surprising success. We do not, of course, attach undue weight to any *one* case, but were really struck with the apparent effects of the ergot. Trials with it should certainly be encouraged and reported. See, also, the cases successfully treated by the ice-bath, below.]

20. With the special view of the employment of creosote in caries of the teeth, a solidified preparation has been contrived by mixing 15 parts by weight of creosote with 10 of collodion. The mixture is of the consistence of jelly, and is used just as if the collodion had not been added. It will be found useful, we think, in many cases besides those for which it was made by M. Martin.

21. The following extract fully expresses the opinion of Dr. Jones, of the London Metropolitan Free Hospital, regarding glycerine as a sudorific, inducing "free and gentle perspiration." The application is made by having the whole surface of the body and limbs sponged with glycerine and water, in equal proportions, night and morning. "It is probable that glycerine has a twofold action on the skin, both tending to the same end—1st. It softens the cuticle, and removes obstructions from the orifices of the sweat-ducts; 2dly. It possibly acts by inducing the escape of fluid by exosmosis. I have used it in several cases of acute dropsy with albuminaria after scarlatina, with

good results. I have not found it to produce any injurious effects in any case."

22. Dr. Sayre publishes two cases of delirium tremens, successfully treated by the iced-bath, which, though by no means the only ones on record, possess doubtless so much interest for our readers that we reproduce them entire. The first was communicated to him by Dr. Orsamus Smith, of the Hospital at the Workhouse on Blackwell's Island.

"John Wilson, a native of England, 45 years of age, blacksmith by trade, has been in this country fourteen years; he has an excellent constitution, and is remarkably strong and vigorous; was sent to the Workhouse January 19, 1862. Jan. 20th.—Showing no signs of delirium, he was set to work. On the evening of January 22d he became so delirious that we were obliged to place him in a cell by himself, with no medical treatment, for I wished the height of his delirium to have been attained, that I might give the ice-water a fair trial. He became gradually worse until the evening of January 23d, when it became necessary to place a strait-jacket on him. His delirium continued to increase during the night so much, that we were obliged to tie him down. Jan. 24th.—He was now as wild as it was possible for him to be. I had the bath prepared, and sent for Dr. Clark, of the Almshouse. 8½ o'clock, A. M.—The strait-jacket was now removed, and his lungs examined by Dr. Clark and myself, and found perfectly healthy; he was stripped, and placed in the bath-tub, where he was kept nine minutes; the ice was broken into small pieces, and dropped in during the whole time; temperature of the water 38°. His pulse was now 102 beats per minute. 1st minute, no change perceptible; 2d minute, no change perceptible; 3d minute, pulse stronger, and not so frequent; 4th minute, sedative effects very perceptible; 5th minute, pulse 100; 6th minute, sedative effects more marked; 7th minute, pulse 90; 8th minute, pulse 80; 9th minute, patient perfectly quiet. He was now removed from the bath, rubbed dry, and placed in bed, well covered up. Ten minutes after, pulse 72; he lay quiet; talks perfectly rational. Nine o'clock, pulse 85: has stopped talking, and is perfectly quiet. He remained quiet until 1 o'clock, P. M.; did not sleep; then symptoms of delirium again began to show themselves, and increased rapidly until 8 o'clock, P. M. He was again placed in the bath; temperature of the water 38°; pulse 82. He was kept in the water this time twelve minutes. 3d minute, sedative effects marked; 4th minute, pulse slower; 6th minute, pulse 64; 11th minute, pulse 50; 12th minute, he was now on the verge of syncope, and

gasping. I immediately removed him from the bath, had him rubbed dry, and placed in bed, when he soon went to sleep. Jan 25th.—Slept well all night, ate his breakfast, and has again gone to sleep. Jan. 26th.—Slept well last night. Jan. 27th.—Eats heartily; no symptoms of tremor remain. Jan. 28th.—He has gone to work, perfectly well. I am confident that if I had continued the first bath until I had made a more decided impression upon him, there would have been no occasion for the second one; but it was the first time I had ever seen anything of the kind, and I was naturally afraid of so powerful a remedy."

Dr. Sayre adds that he has used the ice-bath several times with the most satisfactory results, and gives the following from his own practice:

"I was called about 11 P. M. to one of our fashionable hotels, to see a gentleman with delirium tremens. He was under the care of two of the best physicians in the city, and yet he was unable to be composed. Had had no sleep for some time, was perfectly wild, great muscular tremor, and jactitation; pulse 160. He was placed in the ice-bath, and retained there 10½ minutes, when he became quiet; pulse 76. He was then placed in bed, and almost immediately dropped asleep. The nurse was directed to repeat the bath in case he again became wild; but strictly cautioned about the danger, and the necessity of carefully watching the pulse, in order not to produce too great exhaustion. The next morning I called in consultation at 10 o'clock, and found the patient had gone to business. The nurse stated that he slept quiet until 4 A. M., and then began to talk a little wild; he put him in the bath for three minutes, when he became quiet and was put in bed; he immediately fell asleep, and got up at 8 o'clock, perfectly well, ate his breakfast, and went down town to business.

"It is only necessary to refer to the travels of any person in the arctic region, to learn the powerful sedative effect of intense cold; in fact, it is impossible to rouse them up and prevent them from going to sleep. Now this is the great object to be produced in delirium tremens, and in the application of cold we have an agent more powerful than opium, and equally safe if carefully watched."

23. Under the somewhat singular title of Pulverization of Mineral Waters, says the *London Medical Times and Gazette*, M. Sales-Girons has for some years past been endeavoring to draw attention to a mode of administering mineral waters, by which he asserts that they may, in the form of finely-divided spray, be brought into immediate contact with the broncho-laryngeal mucous membrane. He has had chambers

constructed to facilitate the spraying on a large scale, as also portable apparatus suitable for individual application. His statements respecting the working of his apparatus, and the results obtained, have been strongly contested; and many communications *pro* and *con* having been addressed to the Académie de Médecine on the subject, it desired its Committee on Mineral Waters to make a special report. This M. Poggiale has recently done, reviewing all the publications which had taken place on the matter, and pointing out the very contradictory character of the statements which have been made. In face of these contradictions, the Committee has felt itself called upon to undertake an experimental reinvestigation, and now reports the results.

(1.) *Can Pulverized or Sprayed Liquids Penetrate into the Respiratory Passages?* Experiments upon animals, and upon man, seem to leave the fact of the penetration indubitable, although to effect it is a matter of such difficulty as to render it not surprising that some experimenters have failed in producing it.

(2.) *Do the Pulverized Liquids undergo a Diminution of Temperature on Issuing from the Apparatuses?* They do so; and to avoid this, it is necessary to keep the chambers in which the spraying takes place saturated with the vapor of water, and of a somewhat higher temperature than that of the sprayed fluids.

(3.) *Are Sulphureous Waters Altered in their Chemical Composition by the process of Pulverization?* It is the direct application of sulphureous waters in affections of the respiratory organs that forms one main object of this method; and every one is aware how easily their chemical composition undergoes change, a few minutes' contact with the air sometimes sufficing. From his own experiments and the analyses of various chemists, the reporter concludes that a very considerable desulphuration of these waters takes place under pulverization.

(4.) *In the present state of our knowledge, are the Therapeutic Effects of the Inhalation of Pulverized Liquids determined with any precision?* The Committee was enabled to come to satisfactory conclusions as regarded the penetration, cooling, and desulphuration of pulverized liquids; but it finds itself quite unable to pronounce upon their therapeutical properties; for, while by some observers they are regarded as a most powerful agent in the treatment of diseases of the chest, by others they are declared to be positively injurious. The reporter can therefore only recommend that further careful observations should be made by competent persons.

24. More than ten years ago, Mr. Griffith, one of the Surgeons of

St. George's Parish, Hanover Square, London, published the successful results he had obtained in the treatment of diarrhœa with sulphuric acid. Continued experience with it has, he says, confirmed his views. "In comparison with the acid, opiates are slow in effecting the cure; moreover, they tend to aggravate the sickness commonly attendant on disordered bowels, produce thirst, a dry tongue, and loss of appetite. Whereas the diluted sulphuric acid, given by itself, allays thirst, subdues sickness, arrests vomiting, stops purging; and so rapid is its effect, that it frequently cures by a single dose."

25. The old controversy about the beneficial or injurious effects of mercury in the treatment of syphilis having been revived in many quarters, we must congratulate Dr. Overbeck, of Detmold, on having struck out a new path, viz., that of direct experimentation, by which it is to be hoped that the question concerning the relations of mercury and syphilis may be brought to a final and satisfactory solution.

The chief points of inquiry to which Dr. Overbeck has directed his attention were the absorption of the metallic mercury in the form of mercurial ointment, and of certain other mercurial preparations; and the effects of, and the diseases produced by, mercury. In experimenting with the ointment, which, according to the author, if fresh, is a simple mixture of the finely-divided metal and of fat, and which, if old, also contains oxide of mercury bound to a fatty acid, he traced finely-divided globules of the metal, not only in the skin and cellular tissue, but also in the intercostal muscles, the pleura, the fæcal matters, the kidneys, the liver, the blood, the mucous membrane of the mouth, the fleshy substance of the heart, the brain, and the sediment of the urine, but not in the bones. These experiments were made on cats, dogs, and rabbits, on which part of the thigh, chest, abdomen, or head were shaved, ointment rubbed in, and then a bandage applied, so that the animals could not lick at the part operated upon. The globules found by Dr. Overbeck had generally a diameter of from $\frac{1}{1000}$th to $\frac{1}{2000}$th of a line, while in the ointment their diameter was on the average $\frac{1}{500}$th of a line.

The absence of mercury in the bones is a very remarkable fact, which becomes of additional interest by the results obtained in producing the mercurial cachexy in animals. The pith of the whole question pending between mercurialists and anti-mercurialists is, whether there is a difference or not between the symptoms of secondary syphilis and chronic hydrargyrosis. This it seems almost impossible to decide by clinical observation merely; for although many valuable additions have been made to our knowledge in this way, there was

always room left for doubt, while experimental pathology, on the contrary, seems eminently suited for settling the question, in showing the results of the administration of mercury in animals, where not only the symptoms may be observed free from any complications, but where we also have the light of pathological anatomy to guide us in our conclusions.

The most prominent constitutional symptoms following the administration of mercury, observed by the author in the animals on which he experimented, were inflammation of the skin and of the conjunctiva, salivation, inflammation of the stomach and the intestines, hyperæmia of the liver, the kidneys, the urethra, and the salivary glands, and certain changes of the blood. In the bones, however, no trace of hyperæmia, periostitis, caries, necrosis, or any other morbid alterations could be discovered, although the bones of the whole skeleton of all the animals operated upon were carefully examined. There are, therefore, no diseases of bones caused by mercury in animals, and from this the conclusion may be drawn that there are none such in man. Still, it may be objected to this, that pathological phenomena might occur in men which are not observed in animals; and it therefore becomes necessary to argue the question apart for man. The author then gives us a critical summary of the opinions of some of the most celebrated writers on the subject, especially Sir Astley Cooper, Canstatt, Falck, Hermann, Lorrinser, Bonnet, Becker, Otto, Lobstein, Fricke, Virchow, Rokitansky, and others. The circumstance that particles of mercury visible to the naked eye have been observed in human bones, which the author does not question, he explains by assuming that they were only observed after the bones had been macerated; while they never exist in the bones of the living body, nor immediately after death. By putrefaction the blood-vessels, the connective tissue, the fat, the blood-globules, and all albuminous matters are destroyed, and thus the mechanical impediments to the confluence of small particles of mercury are removed. The presence of the metal in macerated bones is, therefore, of no importance whatever. The only bones which may be really affected by mercury are the jaws, in which necrosis undoubtedly takes place after the administration of the drug; but this is evidently due partly to the direct spreading of inflammation from the mucous membrane of the mouth, and partly to the periosteum being laid bare, and brought under the influence of irritants, such as air, etc., whereby inflammation of the periosteum, and subsequent necrosis of the jaw-bones, may be readily induced. This necrosis is, therefore, no direct consequence of mercurialism, but only

an accidental result of a local disease induced by mercury. Mercurialism and syphilis are, according to the author, widely different morbid processes. The essence of chronic mercurial poisoning consists of anæmia; the albumen and the blood-globules being diminished, the coagulability of the blood being increased, while the amount of water may be augmented or diminished. Mercurialism is not accompanied by plastic exudation of any kind, which is the very essence of constitutional syphilis.

We regret being unable to follow Dr. Overbeck further in his important and interesting argumentation, which is, throughout, based on carefully-conducted experiments, and sound criticism of clinical observations, such as on the action of iodide of potassium and chlorate of potash in syphilis; on the effects of sulphureous thermal waters in hydrargyrosis, etc. We strongly recommend his book to the notice of the medical profession of this country, as one which, although it cannot be said to exhaust the subject on which it treats, must certainly be considered as one of the most important contributions to pathology which have appeared for some time.

26. Prof. Chapman esteems the citro-ammoniacal pyrophosphate of iron, named in brief pyrophosphate of iron, administered in the form of syrup [sold extensively in this city] in many persons and states of disease, superior to all preparations of iron, and "perhaps to any drug whatsoever." He gives a very thorough account of its history and preparation, and details with more or less strict scientific analysis half a dozen cases in which he has employed it.

27. The diversity of opinion respecting the merits of the alkaline hypophosphites depends, according to Mr. Taylor, largely on the precise constitution of the salt used. The wide difference in quantity administered as a dose, varying from 5 grains up to 1 drachm, three times daily, points to the same thing. Mr. Taylor found that not more than *two grains* of a pure hypophosphite of potash or soda can be taken for a dose without exciting nausea and a painful feeling within the anterior part of the thorax, much increased by a frequent repetition of the dose; "nor is it surprising that such a feeling should ensue, when it is considered that a hypophosphite is the most soluble oxide of phosphorus in the animal secretions, and is at once admitted into the venous circulation." The method of manufacture, the chemical constitution of the salts, chemical and physiological data and theories as to their remedial action, and numerous cases from hospital and private practice, are given at some length. The ordinary mode of administration consists in ordering a table-spoonful,

three times daily, of a mixture containing from a scruple to half a drachm of hypophosphite of potash, half an ounce to an ounce of compound tincture of gentian, and seven ounces of cinnamon-water, with a little mucilage; and one thing is absolutely needful: "when the capillaries have been excited by hypophosphites in the blood, the daily food should be improved." The author reports that, in many cases, the disease ran its course more rapidly to a fatal termination under the influence of the hypophosphites, through inability of the patient to procure or digest "sufficient nitrogenous and carbonaceous food (containing a due proportion of phosphatic salts) to repair the waste that had been so long enfeebling him." "In these special cases, a large amount of alcoholic food, temporarily supplied, would enable the almost devitalized absorbents to accept phosphatic food." In cases of anæmia, the efficacy of the hypophosphites has been increased by Mr. Taylor by the addition of a salt of iron from a vegetable acid—the citrate, for example. Further he says, creosote, in doses of a quarter to half a drop, is a most valuable adjunct; morphia proves sometimes an indispensable corrective; ethers, the vegetable alkaloids, ammonia, liq. arsenical., and such metallic salts as do not produce decomposition, are not only chemically compatible, but highly efficient combinations, when therapeutically indicated; a very efficient pill may be formed of two grains of hypophosphite of soda or potash, two grains of sugar of milk, one-fifth of a drop of creosote, and one grain of any desired adjunct powder. We shall quote two or three paragraphs more: "The controversy as to the merits of the alkaline hypophosphites has awakened the spirit of research. It has led me to the discovery of the aptitude of these salts for many morbid conditions to which they were previously thought incapable, and probably others are pursuing the same course of investigation—viz., proving facts in reference to their power in augmenting nervous force in the secerning vessels; in increasing the natural, and diminishing morbid secretions; allaying nervous irritation, and implanting the cementing principle which gives force to other elements in the blood that have become defective through the inordinate lapse of phosphates. Examples are to be found in gestation, prolonged lactation, dentition, some forms of dyspepsia, anæmia, catarrhal and leucorrhœal discharges, and in myalgia and the muscular pains simulating inflammation."

"In conclusion, I would say, that I have not the exalted faith of Dr. Churchill in believing that the alkaline hypophosphites can *cure* phthisis in *all its stages*. They remarkably sustain the vital power,

inducing a strong hope of a favorable issue, even under the depressive influence of cavernous ulcers; but in the advanced stage, from the want of the undiscovered antidote to tubercular degeneration, fatal lapses frequently ensue. In the earlier stages, and before vital declension has become a constitutional power controlling every organic function, they have an admirable effect, enabling the best known means to have increased remedial energy, and thus to effect many more cures than formerly."

In another place, speaking of the specific virtue attached by Churchill to the hypophosphites, Taylor says: "Experience has not confirmed this extravagant encomium as respects the '*curative* in every stage;' the word *palliative* would be more in accordance with fact, when the remedy has been pure, and with auxiliary combinations. But in the earlier and middle stages, the guarded introduction of an alkaline hypophosphite into the blood produces a glowing influence—as a respiratory excitant, expanding the chest; as a pyrogenic, increasing animal heat and nervous force, and removing erratic pains; and as a hæmatogen, forming a nucleus for the rallying of red globules: it increases appetite and cheerfulness, and controls expectoration, night-sweat, and diarrhœa." A few pages further, he adds: "And on the whole, if we believe that 'disease is cured by natural processes, promoted by means which uphold vital power, and that our duty is to search for antidotes to morbid poisons, at the same time upholding vital power,' it appears to me that we have in *phosphorus* and its *salts* the best known antidotes for phthisis."

28. In the paper read before the *Société des Sciences Médicales de Bruxelles*, from which we translate, Dr. Van den Corput, Chief Physician to the Hospital St. Pierre, says, from his trials in his practice for over a year of the different compounds of iodine with antimony, particularly the oxyiodide or basic iodohydrate of antimony, he is convinced that the latter is one of the most active antimonials. Reserving for a special and more extended work the detailed results of his clinical observations, he presents a brief but clear account of the modes of preparation and chemical properties, mode of action and therapeutical properties, modes of employment and formulæ for pharmic combinations of the two iodo-stibiated salts, viz., iodide of antimony and what he calls oxyiodide or oxydo-iodide of antimony. The former is inappropriate for internal use, but may externally be employed as a revulsive, being similar in such irritant properties to stibiated tartar, while the latter, administered internally, resembles in its therapeutic action, as in its composition, kermes mineral prepared in the wet way,

only that it produces much more powerful special resolutive effects. Indeed, it might be termed iodined kermes. It acts as an expectorant and energetic alterant. In doses of 5 to 25 centigrammes [$\frac{3}{4}$ to 4 grs.] it easily provokes nausea and vomiting, or frequent and copious stools. Addition of opiates or other narcotic agent, diminishing gastric susceptibility, of course moderates its action. Tolerance seems to be established as for tartar-emetic, in doses raised from 20 to 50, and even 70 centigrammes in the 24 hours, given in emulsion in a julep of 150 grammes, [4 ounces, 5$\frac{1}{2}$ drachms.]

Generally, a severe diaphoresis is first established, which is soon followed by a lessening in frequency and considerable depression of the pulse. The number of inspirations diminish in frequency, and these effects are accompanied by profound muscular enfeeblement. On account of the profuse transpirations it induces, and the great hyposthenization it entails, this medicament is very rarely applicable in confirmed pulmonary tuberculosis; but in inflammation of the parenchyma of the lungs, in the second stage of pleuro-pneumonia, in "suffocative" catarrh, acute subacute bronchitis and pulmonary œdema, it renders, says Dr. Van den Corput, signal service. We shall speak of these stibiated iodides at greater length in another place, and give to our readers the numerous formulæ that Dr. V. promulgates for their administration.

29. One of the most recent proposals for substitutes for quinine is that of Prof. Gastinel, of the Medical School of Cairo, of two new arsenical compounds, which he presented, in a perfect state of crystallization, to the Egyptian Institute, last year. They were respectively Arseniate of Cafëine and Tanno-arsenious Acid. Dr. Schnepp, of Alexandria, who was appointed to report on their therapeutic power, has already used the latter in several cases, in the daily dose of 20 centigrammes in 20 spoonfuls of water, every quarter of an hour a spoonful, with remarkable success.

30. We report here a simple and quite ingenious improvement on sutures, which, though falling more strictly within the province of our colleague, the reporter on Surgery, we need make no apology for introducing, as it may in some cases be serviceable to our readers. Mr. Higginson claims that "it not only does away with one of the most painful parts of an operation—that of putting in the sutures—but also assists in the quicker healing of the part; not being attended with that inflammation which must, to a certain extent, be set up by the suture acting as a foreign body, no matter of what material it may be made of; but it also gives support to the neighboring parts,

and instead of the dragging force which is employed by the suture keeping the surfaces together at the particular point where it is introduced, from the natural tendency of the lips of the wound to gape asunder, this force is extended over a large surface." The plan merely consists in applying an adhesive strip [prepared by Mr. Higginson by "spreading chamois leather, or such resisting substance, with lead plaster, rather thickly, so as to retain a good hold, and by cutting this into strips of a sufficient width, and having heated it," but we think the very superior sticking plaster now manufactured for the mechanical treatment of joints would answer admirably,] along each margin of the wound, coming almost to the edge, and stitching these strips together. "This plan enables you to examine the wound without having to remove anything but the external dressings; the plaster not being applied exactly at the edge, leaves a space through which you can see whether the surfaces have united or not. It is very serviceable in amputations of the breast, or such parts where the cuts are generally regular; it might even be found practicable in flap or other operations, if the plaster was cut of a proper shape."

REPORT ON OPHTHALMIC AND AURAL DISEASES.

By Wm. Frederic Holcomb, M.D., Prof. of Ophthalmic and Aural Surgery in the New York Medical College and Charity Hospital.

1. *Myopia—its Causes and Treatment.* By M. Van Roosbroeck. (Bulletin Gén. de Thérapeutique Méd. et Chirurg. Rev.)
2. *Abscess in Vitreous Humor.* By J. G. Hildige. (Medical Times and Gazette.)
3. *Medical Treatment of Secondary Capsular Cataract.* By Dr. Mirault, of Angers. (L'Union Médicale.)
4. *New Method of Treating Cataract.* By Dr. Sperino, of Turin. (Dublin Medical Press.)
5. *Entropion Cured by a New Operation.* (Dublin Medical Press.)
6. *Hemeralopia, or Night-Blindness.* By Dr. Baizeau, of the French Army. (Journal de Méd. et Chirurg.)
7. *Abscess of the Brain from Ear Disease.* By M. Richet. (Gazette Hebdomadaire.)
8. *Exophthalmos from Inflammation of Areolar Tissues of Orbit.* (London Lancet, January, 1862.)
9. *Fixing the Eye during the Operation for Cataract.* By J. G. Hildige. (Dublin Hospital Gazette.)
10. *The Treatment of Fistula Lachrymalis by Induced Suppression of the Lachrymal Ducts.* By C. H. Deval, M.D. (Medical Circular, Jan. 1, 1862.)

1. *Myopia—its Causes and Treatment.*—In the great majority of cases, myopia does not exist in a healthy condition of the eye, but is the consequence of an elongation of its axis, produced by posterior staphyloma. This staphylomatous condition is the result of posterior sclero-choroiditis, the first effect of which is softening and atrophy of the parts, and, as the walls become thin, the vitreous humor presses them outward posteriorly. The tumor may, after having acquired a certain size, remain stationary. Sometimes, if the disease is located around the optic nerve, it progresses, causing destruction of the choroid and separation of the retina, with consequent incurable blindness.

Myopia progresses in proportion to the posterior staphyloma. It occurs before puberty, and may not increase after its development, but may go on gradually till the age of thirty, then become stationary; or it may continue to progress even to an advanced age. Myopia, progressing beyond the ordinary period, augurs unfavorably. If the sclero-choroiditis is recognized early, it is amenable to treatment, and cure is nearly certain. The staphyloma can be easily recognized with the ophthalmoscope, and though when once formed it never recedes, its early recognition enables us to act with certainty at a moment which, if passed, may lead to amaurosis.

The most common cause is over-use of the eye. Hence we find that tailors, seamstresses, workers on lace, and students, are subjects of posterior choroiditis and consequent myopia. When a person begins to complain of uneasiness in the eye, and indistinct vision, instead of going to an optician and procuring glasses, which may temporarily enable him to see clearly, and thus use the eye to its increased detriment, he should consult a physician who can examine with the ophthalmoscope, and institute the proper course of treatment.

Absolute repose, derivatives to relieve the congestion, cooling applications to the eye and temple, the frequent application of a weak solution of atrophine, leeches, or dry cups to the temples, will tend to arrest the disease.

If it has progressed beyond the age of thirty, it will seldom be checked, but go on to old age. In such cases, the use of proper glasses, that is, those neither too strong nor too weak, will enable the patient to use the eye for the ordinary business of life. Generally, a pair is required for near objects, and another for distant ones. If there is much amblyopia, great caution must be exercised in using the eyes; if used at all, intervals of rest should be frequently allowed, and at night the brilliancy of the light should be modified by colored shades.

NOTE.—The translator would increase the caution given above in regard to *repose;* it must, indeed, be *absolute.* Many physicians unwisely advise traveling for restoring such eyes. It is certain, if a man travels, he *must* use his eyes. In cases of patients sent to Switzerland, the ascension of Snow Mountains has often resulted in permanent injury of vision. Even riding in rail-cars in our own country in summer, will, if continued for days, almost certainly create a conjunctivitis. In traveling over our Northern States in winter, the dazzling light reflected from the snow will sometimes bring on retinitis. Hunting, fishing, cannot be indulged in, and even walking in towns where houses built of light-colored stone, (as in Paris,) reflect a most trying light, will materially increase progressive posterior choroiditis. *Absolute rest* must be enforced, and this can be secured only by remaining in-doors, where the light is moderate, taking open-air exercise only in cloudy weather—or, if in clear, only before sunrise or after sunset.—H.

2. *Abscess of the Vitreous Humor.*—John W., aged 58 years, of sanguine lymphatic temperament, was attacked with inflammation of left eye, and when first seen, the lids were exceedingly tumefied, with extensive chemosis, cornea opaque, very severe pain in orbit, so as to prevent sleep for the last fourteen days. The patient was salivated, blistered on the temple, without benefit; as he was much reduced, the eye was extirpated. Examination showed the eye much enlarged in all directions, with the cornea tending to staphyloma. A transverse section revealed an encysted abscess of the size of a small pistol bullet, containing healthy pus. This cyst was partially attached to the ciliary body, though posteriorly and laterally it was free. The vitreous humor was free from pus-globules, but was opaque in the vicinity of the cyst. Complete synechia anterior, occlusion of the pupil, lens, and capsule opaque; choroid and retina normal. Mr. Hildige regarded the abscess as the result of inflammation, either of the ciliary body, or of the vitreous humor itself, excited by inflammation of the surrounding parts.

3. *Medical Treatment for Secondary Capsular Cataract.*—Dr. Mirault, of Angers, advises the employment of medical rather than surgical means for the removal of secondary cataract. After extraction we should be on the watch for this, and if any opacity presents itself, it should be immediately combated by severe antiphlogistic

remedies. Bleeding, general and local, internal and external revulsives, with belladonna and mercurial frictions. Dr. Mirault affirms to have found this treatment successful in many cases in less than eleven days.

4. Dr. Sperino, of Turin, states that he has found in cases of individuals suffering from cataract, that if the aqueous humor be evacuated daily, or every two or three days, the lens gradually recovers its pellucidity, and the sight progressively improves. Dr. S. is about to publish an account of the researches which led to his discovery of this method, and the success which has followed it.

5. It has lately been proposed to divide the tensor tarsi muscle between the superior puncta lachrymalis and the caruncle, for the relief of *entropion*. Much benefit is reported to have followed this treatment.

6. *Hemeralopia, or Night-Blindness.*—Dr. Baizeau, of the French army, observed an epidemic of this disease, in 1856, which broke out March 28th, and during April many cases occurred. The division changed location in May, when it became more frequent, but ceased at the end of the month, reappearing after a few days. The disease followed the army to Marseilles, but attacked only two companies, which were under canvas. It disappeared as winter approached, and again returned in January. In May, 1857, Dr. Baizeau observed it in the army at Paris, but it disappeared in July, 1858. The disease seldom endangers vision, but may entail serious consequences in the case of men to whom the guard of an important post is assigned at night. Gen. Bazaine stated, that so many of the men were affected with this disease at Sebastopol, that several regiments were reduced so as to be unable to supply the usual guards. Dupont (in 1772) states, that several sentinels of the army of Strasbourg, affected by this disease, fell into the ditches at night. It attacks both land and marine forces, but is generally confined to privates. Out of three hundred cases, Dr. Bazeau found only three officers. Sudden changes of temperature are most liable to bring on this night-blindness. Dr. B. advises that during warm weather the soldiers should be drilled in the shade, and at night wear the hooded overcoat. M. Fleury proposes that sailors should wear broad-brimmed straw hats with a green shade beneath the brim, and that tents be used on deck at night. When first attacked, the men should be exempt from all duty; this, in nine cases out of ten, will bring about a cure. But if the disease has advanced, the azure-tinted glasses may be worn, as advised by M.

Sichel. Fomentations of hot water, cod-liver oil in six or eight drachm doses on an empty stomach in the morning, mild counter-irritants, aperients, stimulating foot-baths, dry cups, and scarifying, if necessary, make up the sum-total of the treatment.

7. *Abscess of the Brain from Ear Disease.*—M. Richet received a patient at the Hospital St. Louis who had slight otorrhœa. He had suffered little from the ailment, but on the following day, when in apparent health, he was seized with a convulsion, and died. At the autopsy, the petrous bone was found diseased, but the dura mater was healthy. The tympanal cavity was filled with pus. All the convolutions of the left hemisphere were effaced, and a collection of pus occupied the whole of the sphenoidal and occipital lobes; the parietal alone remaining intact. The patient had not manifested the slightest intellectual disturbance, and no symptom indicated cerebral lesion, when the pus, bursting into the lateral ventricle, caused instant death.

NOTE.—Two cases of caries, and consequent perforation of the temporal bone, resulting in death, have fallen under my observation. The case of a child aged eleven years, admitted into St. Joseph's Hospital, in Prague, Bohemia, was most interesting. The patient had a very strumous constitution, and had suffered, from infancy, from otorrhœa. Little attention was paid to the ears, except to syringe them frequently, in order to diminish the fœtor they caused throughout the ward. The child was considered stupid, and towards the last, as it seemed much inclined to sleep, it was thought to have tubercular disease of the brain. The glands about the ear were much enlarged, and two or three days before death, the ear and parotid region presented a gangrenous appearance. At the *post-mortem*—which was conducted hastily, in consequence of the intolerable stench emitted on opening the cranium—the base of the brain was found softened, floating apparently in a bed of pus. Having paid special attention to the case during life, I was desirous of examining the internal and middle ear. Not only was permission granted in this case, but the rare privilege was accorded by Profs. Lambl and Löschner, of examining all who died during four months having any serious affection of the ear. On detaching the softened dura mater from the temporal bone of

the left ear, I found a perforation leading from the upper portion of the mastoid cells, opening about three-fourths of an inch *outward* from the superior semicircular canal, into the cranial cavity. The temporal bone was carious throughout. The glenoid cavity, the condyle and ramus of the jaw, were nearly destroyed. The tympanum was gone, but the ossicula remained intact. The internal ear was not opened, as it was obvious what amount of disease existed, from the fact that the nerves were softened, and fœtid pus was exuding from the numerous foramina. There had been facial paralysis of the left side. There was otorrhœa of the right ear; the drum was gone, but caries had not commenced. A similar case was lately reported at the New York Pathological Society. If perforation or trephining into the mastoid process is ever warrantable, it would seem to be in these cases. The long-neglected disease undoubtedly extended from the middle ear to the mastoid cells, where there are numerous foramina for the passage of blood-vessels, through which the pus found its way into the cranial cavity. *Wilde*, in his work on "Diseases of the Ear," (page 401 of the American edition of 1853,) speaks of a very similar case reported by Dr. Graves. These cases should warn us not to neglect "running from the ear," but to examine with care the tympanum and middle ear, and treat them while amenable to cure.—H.

8. *Exophthalmos, from Suppurative Inflammation of the Orbital Areolar Tissue—Sloughing—Recovery.*—Rosina M., aged 17, was admitted into St. Bartholomew's Hospital on the 18th of July, suffering from erysipelas of the right side of the head and face. This subsided, leaving the right upper eyelid swollen. Suppuration took place, and the abscess was opened by the house-surgeon. A quantity of pus escaped, but the wound did not heal. Dr. Burrows, whose case it was, requested Mr. Coote to take it in charge. He found the eyeball much protruded, and everted on its axis. Large doses of steel were ordered, with good diet, wine, etc., and the patient was directed to walk about the court of the hospital. The sight was much disturbed. On the 24th of August, while the patient was bathing the eye, she pulled out two sloughs of areolar tissue of considerable size, evidently from the back of the orbit. This was followed by a gradual recession of the eyeball, with improvement of sight, and the wound in the eyelid seemed disposed to close. On

the 7th of September a third and smaller slough made its way out, and by the 23d, the eye had in a great measure regained its natural position. The patient shortly after left the hospital.

9. "*Fixing the Eye during the Operation for Cataract.*"—It must be obvious to every prudent surgeon, that an eye on which the operation for cataract is about to be performed, should be absolutely fixed and steady; for although an operator, after long practice, may acquire a dexterity which will enable him to operate successfully nineteen times out of twenty without the eye being fixed, yet the truthfulness of the remark made by *Larrey*, that "nothing in surgery should ever be abandoned to chance," must be acknowledged to be peculiarly applicable to the case to which we refer. Of the different instruments made use of by ophthalmic surgeons for the purpose of fixing the eye, may be mentioned the "*Pique de Pamard*," employed principally in France; "Désmarres' Thimble," seldom had recourse to; the double "Ophthalmostat" of Edward Jäger, made use of chiefly by that gentleman himself; and lastly, a pair of common toothed forceps.

The "*Pique de Pamard*" is employed in the following manner: It is inserted into the conjunctiva at the inner angle of the eye, a little above the transverse diameter of the eyeball, and at a distance of about *two lines* from the cornea. It is not necessary to introduce it so far as its transverse portion, which, according to Désmarres, is of no use whatsoever. As soon as the *counter*-puncture is made, the instrument of course becomes almost useless, as the eye is then maintained sufficiently steady by the knife of the operator. Désmarres' thimble is constructed in such a manner that it can be adapted to the upper part of the middle finger, so that the operator can himself depress the lower lid, and regulate the amount of pressure necessary to control the movements of the eye. As the sides of the instrument separate from each other with facility, it can be adapted to fingers of different sizes. The "ophthalmostat" of Edward Jäger is a most useful instrument, and controls the movement of the eye much more effectually than either of those recommended by Désmarres; the only objection to its use being, that it is apt to produce inflammation of the conjunctiva, besides not being well borne by the patient. The instrument consists of two small forceps, which are held constantly open by means of an elastic spring; the branches of each unite inferiorly in one arm. The conjunctiva is seized on each side of the cornea, and a little below the transverse diameter of the eye, with the

instrument, which is held in the right or left hand, according to the eye which is to be operated on. Dr. Jäger states that he has continually used this instrument during the space of three years in all sorts of operations on the eye—viz., extracting foreign bodies, making artificial pupils, as well as in cataract operations—and that he has never found the more deeply-lying tissues and organs to have been in the least injured by it. An instrument which has almost completely superseded all others, particularly in these countries (?) and in Prussia, is the common toothed forceps; in fact, with it we can seize the eye more readily, and with less annoyance to the patient, than with any of the others I have just described. Mr. France, in alluding to this mode of fixing the eye, says: "Indeed, the importance of fixing an eye effectually can hardly be exaggerated; for, from the spasmodic or instinctive movements of the organ, arise the accidents to which the operation is obnoxious. It is not, of course, disputed for a moment that the operation performed in the ordinary way by competent surgeons is, in the great majority of cases, successful in restoring sight; but still, as even in the best hands casualties will occasionally occur, and render more precarious or less perfect (when it does not absolutely prevent) the favorable result, an unobjectionable means of obviating the chief cause is a great desideratum, and cannot but conduce materially to enhance the average of success." Mr. France appears to have been the first to have suggested this method of holding the eye in these countries, (*vide* Guy's Hospital Reports for 1858,) but the practice was not, at the time he wrote, by any means new on the Continent. As far back as 1854, Von Graëfe used the toothed forceps for cataract, and, if I remember aright, had taken the idea from one of his predecessors. It was not considered novel during my visit to his clinique in the years 1855–6. Mr. France seems not to have been aware of this. (*Vide* Guy's Hospital Reports for 1858–60.) In the year 1855 Rothmünd and Nüssbaum, at Munich, were also making use of the toothed forceps in operations for cataract; and about the same period, Jünge, an assistant of Von Graëfe, introduced the method into Russia: so that it was known and practiced on the Continent four or five years previous to the period at which Mr. France first described it in England.

NOTE.—The skill of the operator must be great in any case, but local physical conditions often render some cases very embarrassing. A very shelving supra-orbital ridge; a small sunken bulb, or a very large protruding one; a conjunctiva

which is soft and friable: in connection with these, to have assistants who do not quickly appreciate and lack skill to foresee and avert danger, will often defeat the best surgeons. Hence it is almost absolutely necessary to have always the same assistants. In *extraction* of cataract, Sichel, of Paris, never holds the eye with any instrument, but sustains it by the balls of the index and middle fingers. Désmarres rarely uses anything to steady the bulb in cataract operations, but occasionally, however, he employs the "pique de pamard;" I have never seen him use his "thimble." Roux, like Sichel, always held the eyeball with the fingers. Velpeau, Chassaignac, Nélaton, rarely use anything to hold the bulb in operations by extraction. Prussian oculists generally fix the ball with forceps. Arlt and Stellwag Von Carion discourage the use of all ophthalmostatic apparatus, as did also Mackenzie, and Tyrrell does not refer to this point. The reason urged by some of these surgeons against fixing the ball is, that in case the assistant fails to hold the upper lid and the patient becomes unmanageable, it is often difficult to remove the forceps. I have frequently seen the patient, by a sudden motion, tear away the portion of conjunctiva held between the teeth of the spring forceps. In using the broad needle with a guard, that is, the "pique de pamard," it can be removed instantly in case of necessity. *Spring* tooth forceps, *properly* made, can be removed in a moment by a good assistant. I have never seen any ill effects from their use, though the bite of the teeth is at first very disagreeable to the patient. I first saw them used in Paris, in 1851. I prefer them to anything else, when any instrument is required. The communication of Mr. Hildige is of great importance, as very little has been written on this subject in English surgical works. Though many advise "fixing the eye," they do not advise what method to employ. The whole gist of the question turns on the opinion of the surgeon in regard to the advantages and disadvantages of controlling the bulb by any means other than the fingers. Young surgeons are too prone to follow example rather than reason. Students and medical men are guided by the advice of their teachers and those whom they esteem as operators. This is also true in respect to countries. All Prussian oculists are inclined to fol-

low the teachings of Jüngken and Von Graëfe, (father and son,) and others of their great men. The Austrian teachers and leaders are Jäger, (father and son,) Arlt, and Hasner; and they are followed in Southern Europe. Donders is authority in Holland. Sichel and Désmarres are the *oculists* of Paris, while the great *surgeons* of that city look upon oculists with a sort of contempt, and differ among themselves as to the major and minor points of operations. In ophthalmic surgery, the English mind is moulded by Critchett, Bowman, and others. In Ireland, by Jacob and Wilde. In Scotland, the sound teachings of Mackenzie remain as a guide. In America we follow no *one*, but glean what we can by observation at home and abroad, and act independently. *Specialists*, and particularly *oculists*, have been regarded in America as charlatans and itinerant humbugs, and none, until recently, were willing to incur the opprobrium customarily attaching itself to this branch of surgery. At no very distant day—one generation at the farthest—the opinion of American *specialists* will be regarded with respect. Our contemporaries, J. Marion Sims and Horace Green, have already acquired "distinguished consideration," if not enduring fame; not at home only, but among the *savans* of Europe. One thing is *certain:* we shall be jealous of no neighbors. In France, *German* surgeons are regarded as second-rate, while the Germans will scarcely ever allow that anything *French* can be reasonable and philosophical. English, Irish, and Scotch doctors each regard *themselves* with great satisfaction, but speak of each other with a curious complacency, indicating that they think they know at least as *much* as their neighbors; and finally, all Europe looks upon American doctors and their opinions—in general—with a sneering pity. It might, perhaps, benefit us and them, if they were to visit America and examine for themselves. Here, as in Europe, there are numbers of eminent men who have scarcely written anything since their theses were completed. Maisonneuve once said to his class, "that the majority of medical books are written before their authors have had any experience, and after a reputation is gained, there is no time for anything but practice."

Let us not, therefore, rely too much on books, but observe, think, and judge for ourselves.—H.

10. *The Treatment of Tumors and Fistula Lachrymalis by Induted Suppression of the Lachrymal Ducts.* (From a Practical and Theoretical Treatise on Diseases of the Eye, now in course of publication.)

Of all diseases which form part of the external pathology, tumors and fistulas of the lachrymal apparatus are, perhaps, those which have led to the greatest number of surgical operations. We have advocated, in their turn, injections by the upper duct, (Anél's method,) and by the lower, (of Laforest de Gensual,) the progressive dilatation of the nasal passage by foreign bodies of all kinds, (of Ware, Bowman, etc.,) its permanent dilatation with metallic tubes, (of Foubert and Dupuytren,) the establishment of a passage for the fluids by the perforation of the os unguis, (of Woolhouse,) or from the upper maxillary, (of Langier,) the suppression of the secretory apparatus, (of Paul Bernard,) or the excretory of the tears, (Nannoni's method,) and others. My practice formerly was limited to the following:

First.—Medical treatment in those cases in which I might reasonably hope for success without having recourse to other means.

Second.—Temporary dilatation by means of catgut and lead nails in cases in which medical treatment failed, or was judged from the first insufficient.

Third.—Perforation of the unguis in case of incurable closure of the nasal passage.

Fourth.—Destruction of the sac by means of caustics when closure threatened the last duct and lachrymal passages, the sac being transformed into a regular cyst.

Struck by the non-success of temporary dilatation at the end of months and years of patient trial, I have simplified my manner of proceeding, and have reason to congratulate myself on the success of my plan. At present, I usually counsel medical treatment in those conditions already known to the reader; in all others, I advise abolition of the sac.

1st. *Actual Cautery.*—The destruction of the lachrymal sac with hot iron is by no means a modern invention. Such was the practice of Avicenna, of Albucasis, and of all the Arab surgeons. Celsus recommends, Book 7, Chap. 7, catching with a hook the tissues surrounding the fistulous orifice, and removing them until the bone is exposed, which should be immediately cauterized with the hot iron. The obliteration of the lachrymal passage by actual cautery was practiced

in the second half of the last century by Laurent Nannoni, of Florence, who followed in this respect the precepts of his father, Ange Nannoni; he generalized the method which at present occupies our attention, and for its realization, employed lunar and chemical caustics. M. Désmarres, who has performed a good many operations of this kind, advises for their execution the employment of a round cautery, "la tête de Moineau," of Ambroise, Paré.* Having used it several times, I can say it fully answered the purpose intended. The operation is, besides, very easy, and is completed in two visits, opening the sac and ustion of this reservoir. The incision should be longer in those cases in which it is proposed to introduce a nail or quill, etc. M. Désmarres says about three centimetres; that is, one above the orbicular tendon, in which it is necessary to make an incision, and two below. Such an extensive incision enables us to cauterize effectually the whole surface of the affected sac, and prevents those relapses which would often recur were it not for this precaution, particularly in the *cul-de-sac*, situated in the tendon of the muscle.

Having opened the sac according to the method employed by J L. Petit, I pass a fluted sound under the cord of the tendon and cut it, as well as the tissues surrounding it above, by sliding the bistoury on the groove of the conductor. The actual cautery may be put off till the following day, or the day after; but I always prefer proceeding with it at once, as we thus satisfy the natural impatience of the patient, and avoid the swelling of the tissues, which I have in some cases observed after the first incision. The patient must be in bed, and all flow of blood stopped before proceeding to actual cautery. The iron should be at a white heat. This is better done in the fire than in the flame of a spirit-lamp. I have sometimes been obliged to begin the operation anew, by heating the iron at the fire, the first attempt at the lamp being unsuccessful. The cauterization should be confined to the interior of the sac, in that part surrounded by a partition of bone. Burning the skin would cause severe pain, and what is more to be dreaded, an ugly cicatrix, and frequently extroversion of the lower eyelid towards the great angle. To succeed, assistants must hold the edges of the wound widely apart with hooks. While the eye of the patient is covered with a piece of wet linen, the surgeon, who holds the cautery in the right hand, sweeps it boldly from the upper part of

* The cautery used by Désmarres is not like "tête de Moineau of Paré," which is a cautery, shaped like a *sparrow's* head. In Désmarres', the *beak* is longer, and is more like the head of a humming-bird.—H.

the gaping cavity to the opening of the nasal passage. During the twenty-four or thirty-six hours following the operation, cooling fomentations must be applied. Later, a dressing of linen covered with cerate is sufficient. The cure is effected at the end of two or three weeks.

2nd. *Application of Caustics—Emploi de la pâte de Canquoin.**—Although the preceding expedient furnishes excellent results, it has some inconveniences. It is very alarming to the patient, and after this unusual operation, the surgeon may have to deplore an event such as happened in one of our hospitals, namely, the death of the patient from erysipelas of the face. The section of the tendon of the palpebræ, and the long incision which this proceeding requires, causes a more disfiguring cicatrix than a wound less extensive, and it is usually after the actual cautery that I have observed in the region of the sac a very disagreeable scar. These considerations have induced us to substitute for actual cautery chemical caustics, which, well employed, produce cures equally prompt and lasting. I proceed, generally, in the following manner: Systematical incision of the sac, the orbicular tendon remaining intact; bathing with a sponge and cold water: when the flow of blood has ceased, we take a stick of Pâte de Canquoin, No. 1, about the size of a crow-quill, and cutting a piece about eight to ten millimetres in length, (*i. e.*, 3 to 4 inches,) it is introduced deeply into the sac. This is afterwards covered with lint kept in place by a bit of court-plaster, and the eye covered with a shade. The patient is ordered home (in a carriage, if possible,) and the severe pain gradually moderates. Twenty-four hours after, remove the plaster and the lint, and draw out the detritus of the pâte with Davil's scraper. Same dressing as before. The eschar is of a grayish-black color, at first very decided; the wound is surrounded by an areola of a red color, which is sometimes œdematous, and often spreads over a large part of the lower eyelid; it might at first sight be taken for erysipelas, but it is merely the effect of cauterization. In all cases, the patient must be warned against exposing himself to cold, because extensive inflammation of an erysipelatous nature might be brought on by imprudence. When such a thing has occurred, however, it has been speedily checked by the most simple means, and has never prejudiced

* "Pâte de Canquoin" is an escharotic formed by mixing chloride of zinc, one part, and flour, two parts, mixed with water and made into a flat cake, and cut into strips to suit convenience. This is called No. 1; No. 2 has flour three parts; No. 3, flour four parts; No. 4 has five parts to one of zinc. No. 1 is the No. usually employed.—H.

the success of the operation. The eschar comes away at the end of twelve or fifteen days; the fall of the "parties sphacelées" is soon followed by cicatrization, which always takes place from the eighteenth to the twenty-first day—sometimes sooner. The appearance of a pimple in the region of the wound may render cauterization necessary for the excision of the fungous growth. By degrees the integuments become supple, and the cicatrix gradually disappears. Our treatment is now confined to keeping the wound from contact with the air, and to drink some tumblers "d'eau de Pullna," (*i. e.*, a saline purgative similar to pulv. Seidlitz,) if, as I have sometimes found, the tongue becomes *suburrale*, (*i. e.*, foul.) The patient should call every two or three days. Such is the simplicity of this treatment, that having operated on the 17th of September, 1859, on a woman in the "Hospital for Incurables," she did not appear till three weeks afterwards, and then only to show that she was cured. "La pâte de Canquoin," when prepared a long time before being used, is much slower in action, and also more gradual and efficacious, and at the same time producing less pain. This is the result of practical observation, and as it is known that this preparation causes great pain, everything which tends to lessen it should be received with favor. Experience has shown us the favorable influence exercised by caustics of this kind in cases of deterioration of the bony tissues. The application of "Pâte de Canquoin," therefore, in lachrymal affections, even when accompanied by caries, may be very efficacious. An objection to the plan just described may be urged—the *wateriness*—which the persistence of the lachrymal gland must render incurable, which is an inconvenience common to all the expedients connected with the method in question. Experience has proved that if the flow is sometimes great, in other cases it is so slight as to cause no inconvenience to the patient, and very often disappears altogether. The possibility of the resumption of the lachrymal fluid by the absorbent vessels, in the absence of the free play of the tubes destined to contain them, is corroborated by the observation of all surgeons who have practiced this method. As M. Stoeber has very justly remarked, the stopping of the flow after the destruction, as well as after the cure of the sac, is explained, if we admit that, in the normal state, the secretion of tears is not sufficiently abundant to allow of a permanent flow into the nostrils, and that there is no watering in "lachrymo-blennorrhées," but because the irritation of the sac is communicated to the conjunctiva and the lachrymal gland, and augments the secretion of the latter. M. Tavignot says he has noticed a tendency in this flow to continue when the la

chrymal tumor has been of long standing; the sympathetic reaction of the inflamed sac on the gland having caused a habit of *hyper-secretion* which we must expect to last long, but not indefinitely. I have destroyed many of these sacs with chloride of zinc, but have given up its use, because, being more energetic than the "Pâte de Canquoin," it is not so easily managed, and is more dangerous, sometimes making larger scars than is at all desirable. To apply it, take a piece of the size of a small pea and place it in a quill about two centimetres long; above the caustic in the tube some bits of lint and wet paper are placed; the sac being opened and the parts well cleansed, the quill is introduced as far as the os unguis, the caustic being applied to this bone. A little stick fitting the quill, like a syringe, is used to push the chloride and the lint into the sac; the quill is then removed, and lastly, the stick which has held the caustic and dressing in place against the anterior wall of the sac. A large piece of lint is immediately introduced, to prevent the chloride from mixing with the tears and cauterizing the lips of the wound. The eye is then bandaged, and the patient remains in this position for half an hour. At the end of that time, cold water in large quantities must be injected into the sac, in order to prevent cauterization of the lips of the wound from the continued solution; a very important point in the operation.

Lunar caustic, recommended by Lallemand and a great number of surgeons, does not appear to me to be energetic enough to accomplish the end in view in operations of this kind. Rosas and Drs. Magne and Gosselin employ butter of antimony; M. Stoeber, caustic potass.

Note.—I forbear adding anything to lengthen this communication. But as my experience has taught me that Bowman's method does not produce a permanent cure in the majority of cases, I will only give my testimony as regards this plan, of which I had such strong hopes. I have seen *Désmarres* use the oxide of zinc treatment, but it is severe, and it often leaves ugly scars. He employed it first at the suggestion of Jungken, of Berlin, about fifteen years since, and speaks of its use in high terms. As to the *pain* caused by the hot iron, Désmarres says "it is very little, and not to be compared with that produced by the caustics; and it has one great advantage, viz., the pain ceases when the cautery is removed." I have never seen the lachrymal duct cauterized with the hot iron, but from observing its use elsewhere, and the testimony of those who have employed it for fistula lachrymalis, I feel strongly inclined to make a trial of it.—H.

Report of a Committee of the Associate Medical Members of the Sanitary Commission on the Subject of Pneumonia.

(Continued from page 221.)

The indications which have reference to the second stage of pneumonia are now to be considered. And it is to be borne in mind that this stage occurs in the vast majority of cases, and often speedily follows the attack. The change, as regards the indications, renders it important to determine when the disease has passed into the second stage—in other words, when the solidification of the affected lobe has taken place. The physical signs of solidification (bronchial respiration and bronchophony) afford reliable evidence on this point. The absence of chlorides in the urine, also, may be relied on with considerable, but not implicit, confidence, that the process of exudation is going on.

In the second stage, so far as the local affection of the lobe primarily involved is concerned, all the mischief which, in the majority of cases, may be expected to occur, has already occurred. The only untoward events (exclusive of complications) which are to be apprehended are the invasion of other lobes, and possibly suppuration and gangrene. The probability of the invasion of another lobe cannot be determined, and, if this were possible, the prevention does not lie within the scope of our resources. What, then, are the objects of management in the second stage of pneumonia?

It may be assumed that blood-letting is not indicated in the second stage. The nauseant and arterial sedatives may be indicated by the persistence of high febrile movement in certain cases; but they are to be employed with even greater circumspection than in the first stage, and they are not to be given for other objects than those already stated. In a large proportion of cases they are either uncalled for or contra-indicated in this stage.

In order to answer the inquiry just made, let it be asked, What are the requirements for recovery in the second stage of pneumonia? So far as the local affection is concerned, the exudation is to be removed; in other words, resolution is to take place; and, as regards the general condition, the powers of life must be adequate to carry the patient through the processes of restoration. The objects of treatment must relate to these requirements. The question, then, is, What can be done to promote resolution of the local affection, and what to aid the powers of life to effect recovery?

First, as regards resolution of the local affection. Antimonial preparations have been considered to contribute to this object. Laennec, ascertaining by means of physical exploration the rapid disappearance of solidification under large doses of tartar-emetic, was led to extol this remedy. But at that time cases of pneumonia without any active treatment had not been observed. It is now certain that the solidification may disappear with great rapidity, not only under different remedies, but when no remedy is given. Laennec and others naturally enough mistook for the effects of medication the changes occur-

ring in the natural course of the disease. With our present knowledge, preparations of antimony are not indicated for the object under consideration. Given for this object, when uncalled for or contra-indicated by circumstances relating to the general condition, they are not merely superfluous, but hurtful remedies—the injury, of course, being proportionate to the extent to which they are given.

It is not long since physicians generally deemed it important to give mercury, with a view of promoting resolution, and to push this remedy to ptyalism. But clinical observation has sufficiently shown that absorption of the exuded matter goes on as well without as with mercurialization. There is no need, therefore, of incurring the depressing effects of this treatment. And if mercurialization be not needed, it is certainly not devoid of harm; for every active remedy is potent either for good or evil, and, if not useful, it can hardly fail to be hurtful.

Blisters are still too often employed in pneumonia in order to hasten resolution. There is no evidence that they contribute to this object, and they are highly objectionable on account of the annoyance and irritation which they are likely to occasion. Moreover, they interfere with the daily examination of the chest, by means of which alone accurate information respecting the condition of the lung is to be obtained.

Remedies to promote expectoration are sometimes considered as important. This is probably based on the idea that the expectoration contributes to the removal of the solidifying exudation—an idea already stated to be erroneous. Clinical observation shows that resolution may go on with great rapidity without any expectoration. It is true that an accumulation in the bronchial tubes takes place in some cases, towards the close of life, and doubtless contributes to a fatal result; but the accumulation is due, under these circumstances, to a degree of asthenia, impairing the muscular power necessary for the acts of expectoration, and expectorants are not adequate to afford relief.

In short, it may fairly be doubted if, with our present knowledge, we are able to expedite resolution by any measures employed directly and specially for this object. There are grounds for believing that measures having reference to the general condition of the patient are the most efficient means of acting on the local affection.

Second, as regards measures having reference to the general condition of the patient. The most important of the principles of treatment in pneumonia fall under this head. Resolution of the local affection may take place more or less slowly, but it will take place if the patient do not succumb. The danger in severe cases is generally not from the amount and persistence of the solidificatian of lung, but from the failure of the vital powers before the resolution is accomplished. Pure pneumonia is as much a self-limited affection as the essential fevers; divested of complications and accidents, it runs a definite career, and ends in restoration, if life be sufficiently prolonged. The exceptions to this statement are the rare instances in which the affection runs into the purulent stage. In the majority of fatal cases, as already stated, death is attributable more to asthenia than to apnœa. These consid-

erations, together with the results of clinical experience, enforce the importance of the supporting treatment in pneumonia.

To support the powers of life, is the leading general indication in the second stage of pneumonia. This indication, in urgency, varies much in different cases. In general terms, it is urgent in proportion to the danger from asthenia. It should govern the treatment in those cases distinguished as asthenic, and whenever there are grounds for distrust of the adequateness of the vital powers to carry the patient safely through the disease. It is a serious mistake to defer supporting measures until the symptoms denote imminent danger from failure of the powers of life. If deferred until then, they will probably be too late. The observing and skillful practitioner will foresee and endeavor to forestall a degree of failure attended with imminent danger. The constitution of the patient, his previous health, and his habits, are to be taken into account in judging early of the ability to sustain the disease. Other things being equal, in a warm climate patients are less able to sustain it than in cold or temperate climates; supporting treatment, therefore, is oftener and earlier called for in the former than in the latter. The plantation negro at the South is less able to sustain it than the white man, and, consequently, is more likely to need support. In the varieties of the disease distinguished as asthenic and typhoid, the reliance for successful management must be on supporting measures. These views are the more to be impressed, because it is undoubtedly true that, until lately, the minds of medical men have been so much occupied with the means of subduing inflammation as to overlook the fact that the means for this end not only often conflict with those which are more important for recovery, but may be positively injurious, and even destructive to life. The attention has been directed too much to the disease, and too little to the patient. We have seen that we cannot expect to subdue the disease; we can only hope, in the first stage, to moderate its intensity. But not a little can be done, by judicious management, towards aiding the powers of life to carry the patient safely through the disease.

The supporting treatment embraces tonic remedies, alcoholic stimulants, and nutritious diet. Of tonic remedies, quinia is to be preferred. It is not indicated in mild cases; but, whenever there are grounds for anticipating undue depression of the powers of life, it may be given, and continued during the progress of the disease. The propriety of giving this remedy, in tonic doses, in a malarious region, as well as to patients who have had periodical fever, has been already mentioned in considering the treatment of the first stage. Under these circumstances, the continuance of the remedy during the second stage is not less appropriate.

Alcoholic stimulants form a very important part of the supporting treatment in this disease, as in all others, whenever the great object is to keep the patient alive until the disease has reached the end of its career and advanced into the stage of resolution. The principle is the same as in the essential fevers. And here, as in the management of the essential fevers, alcoholic stimulants are indicated to an extent commensurate with the danger from failure of the vital powers. In

pneumonia, as in typhus or typhoid fever, there is often a remarkable tolerance of alcohol; and the only guide, as regards quantity, is the effect as manifested by the symptoms. No abstract rules can be laid down, applicable to all cases; but careful observation must furnish the rule proper to each individual case. Here, too, as in the continued fevers, because alcoholic stimulants are vastly important in some cases, it is not to be inferred that they are invariably indicated, nor that they can never do harm; on the contrary, if pushed to an injudicious extreme, they are as potent for evil as they are potent for good when judiciously used.* The question may be asked, Under what circumstances is their use to be commenced? We may say that they are indicated always so soon as evidence appears of any tendency to failure of the powers of life. And of this, the action of the heart, as represented by the pulse, is the best criterion. Feebleness, great frequency, and a pulse vibratory or thrilling, but compressible, denoting increased activity but diminished power of the ventricular contractions — these are the characters which indicate supporting measures, of which alcoholic stimulants are an essential part. Given at first in small or moderate doses, the effect is to be watched, and the quantity increased in proportion to the urgency of the indication. The habits of the patient, as regards the use of alcoholic drinks, are, of course, to be taken into account. Whenever the question arises, in the management of a case, whether alcoholic stimulants are advisable, or not, it should be borne in mind that to begin earlier than they are required is far preferable to subsequent delay; for, with proper care, they can be suspended without any injury having been done; but the time lost, by beginning too late, cannot be regained.

Alimentation is an essential part of the supporting treatment. It is not less important to *feed* pneumonias than to "feed fevers," or other diseases, whenever there is danger from failure of the vital powers. If this be considered as a bold assertion, it is believed the only reason is its novelty. It is not long since the idea of feeding fevers was equally bold, because equally novel. The statement that patients with pneumonia may safely be encouraged to take nutritious food during the whole course of the disease, is based on considerable experience. And this should enter into the treatment in proportion as the symptoms denote a tendency to asthenia. Animal essences, or soups, milk, and farinaceous substances, should be combined to form the diet, thus securing a proper variety of alimentary principles. The desires and taste of the patient may generally be trusted. The juice of fruits may be allowed.

It may be considered as superfluous to say that, when the supporting treatment is indicated, measures which conflict with this treatment are contra-indicated. But custom has so long sanctioned the abuse of purgatives, that it may not be amiss to caution against their injudicious use in pneumonia. The usefulness of saline remedies of

* In view of a tendency, at the present time, to an excessive use of alcoholic stimulants, the Committee desire to impress the importance of the exercise of proper discrimination and care in their use.

this class, in the first stage, has been alluded to. They are useful as means of depletion without spoliation. After the first stage, purgatives are only indicated when inconvenience arises from accumulation in the bowels; and the mildest measures suffice. Active cathartics depress the vital powers, and, in this way, do harm in proportion as supporting measures are called for.

The use of opium may be considered in connection with the supporting treatment. Opium may be given, as already stated, to relieve acute pain in the first stage. It may be given, also, to allay cough. But, aside from these objects, clinical observation shows this to be a most valuable remedy in the treatment of pneumonia. Given in full doses, in certain cases, it tranquillizes the system in a remarkable manner. The frequency of the pulse and respirations is sometimes notably diminished. Refreshing sleep is obtained. It appears to render the system tolerant of the local affection, if, indeed, it does not, in some instances, induce a more speedy commencement of resolution than would otherwise have occurred. These statements are based on the employment of this remedy in a large number of recorded cases.* An objection to the use of opium, on the score of interference with expectoration, is already disposed of. Expectoration is of no importance with reference to the resolution of pneumonia. That opium does not retard the absorption of the exudation, is shown by the rapid disappearance of solidification in cases in which the remedy has been freely given. The cases to which opium is specially applicable are those in which the affection excites unusual disturbance of the system, manifested by restlessness, vigilance, typhoid delirium, an irritable pulse, etc. Apprehension of inducing cerebral trouble need not be felt, even when typhoid delirium be present; on the contrary, the good effect of the remedy is often manifested by a more rational condition.†

Pericarditis complicating pneumonia adds greatly to the gravity and danger. By perseverance in the judicious employment of supporting measures, we may hope to save lives which would otherwise have been lost. The writer of this paper has reported a case of pneumonia affecting the whole of the right lung, complicated with pericarditis, and eventuating in pulmonary abscess, in which recovery took place under vigorous and long-continued supporting treatment.‡ It may be added, that timely and efficient support probably affords the best security against suppuration, whether in the form of abscess or purulent infiltration, and also against the occurrence of gangrene, which, happily, is extremely rare.

Pneumonia occurring as a complication of the continued or eruptive fevers, calls for soothing and supporting measures. Depressing

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* See Analysis of Cases, in Am. Journ. of Med. Sciences, No. for Jan., 1861.

† More or less delirium is not very infrequent, even in cases of pneumonia which do not present other symptoms denoting the typhoid condition, and is not in itself necessarily a symptom of grave import.

‡ New Orleans Medical Reporter and Hospital Gazette, Vol. for 1860.

measures, such as blood-letting, antimonial preparations, and purgatives, are very rarely, if ever, admissible under these circumstances.

A few words respecting the management of convalescence: There is little or no tendency to relapse. It must be extremely rare for a patient convalescing to be prostrated by a second attack. There is no need, therefore, of extreme precautions on this score. Experience shows that a solid, substantial diet may be entered upon so soon as the patient is fairly on the road to recovery, and that the convalescence is more rapid than if the appetite be too much restrained. As a rule, ordinary wholesome, digestible articles of food may be allowed, when they are craved by the patient. Permitting the patient to begin to sit up when he feels a desire to do so, will be found not to retard recovery, but, on the other hand, apparently to hasten the progress of resolution.

Finally, with regard to pneumonia, as well as other diseases which may endanger life, let it be borne in mind that, although it is the most important end of medical practice to prevent a fatal termination, this does not comprehend the whole aim of the physician even in cases which recover. If he cannot cut short or abridge the duration of a disease, the next best result is to conduct it to a favorable issue. But this is not all. A rapid convalescence and a complete restoration to health are other important objects. And, in seeking to determine the relative merits of different methods of treating a disease, we are not to be guided solely by a comparison of the ratio of mortality, but by comparing the condition of patients during convalescence and after recovery. As regards the disease under consideration, although the substitution of a soothing and supporting treatment for the active measures formerly in vogue has doubtless diminished the rate of mortality, yet the improvement is equally shown in the rapidity and completeness with which health is regained.

In concluding this Report, the following propositions are submitted, embodying the practical views which have been presented respecting the management of pneumonia:

1. Uncomplicated pneumonia, limited to one lobe, in general, does not claim active treatment of any kind—simple palliative remedies and hygienic measures being alone required.

2. Blood-letting and other antiphlogistic measures, with a view of subduing the inflammation, are not warranted by a sufficient probability of success, and, if resorted to for this purpose, will be likely in many cases to do harm.

3. Blood-letting is useful, not by a direct effect on the local affection, but indirectly by diminishing the intensity of the symptomatic febrile movement. It is admissible only in cases characterized by intensity of the febrile movement, when the affection is said to be sthenic, and only in the first stage of the affection.

4. In the cases to which blood-letting, if employed at all, should be restricted, the good effects may generally be obtained by saline purgatives, together with sedative remedies, such as the preparations of antimony and the veratrum viride.

5. The remedies just named are indicated only in the cases referred

to. Given in cases indiscriminately, and carried to an injudicious extent, they may do much harm. They should be used with great circumspection, and rarely after the first stage of the disease. It is never advisable to push them so far as to occasion distressing nausea or vomiting, and to enfeeble the heart's action.

6. Acute pain, depending on coexisting pleurisy, does not call for general blood-letting. Dry or wet cupping, fomentations, and stimulating applications to the chest are useful, and, if not effectual, opium may be given sufficiently to relieve this symptom. The oiled muslin jacket, to be worn during the disease, is to be recommended.

7. The combination of intermitting fever and pneumonia calls for the prompt use of quinia in sufficient doses to arrest as speedily as possible the paroxysmal affection. Small or moderate doses of this remedy should be given in malarious regions, and to patients who are subject to intermitting fever, in order to prevent the development of intermitting fever, and to obviate the unfavorable influence of the malarious cachexia. The remedy should be continued during the progress of the disease.

8. Antimonial preparations, mercury, blisters, and expectorants are not called for with a view to promote resolution of the pulmonary affection. There are not sufficient grounds for the belief that they hasten the removal of the exudation, and, if not useful, they must be injurious. There are no remedies to be employed specially for this object.

9. In severe cases of pneumonia, after the disease has advanced to the second stage, the most important object of treatment generally is to support the powers of life, to obviate the tendency to death by asthenia, and to carry the patient safely through the disease.

10. The supporting treatment consists of tonic remedies, alcoholic stimulants, and nutritious food. These are to be combined, in order to render the supporting treatment efficient.

11. Alcoholic stimulants may be given without fear of affecting unfavorably the local affection. They should be given so soon, at least, as the heart's action and other symptoms afford evidence of any failure of the vital powers. They are to be given more or less freely, according to the danger from asthenia, the degree of tolerance, and the apparent effect. They are not to be given as a matter of course, but only when indicated; and the quantity given is to be determined by the exercise of care and judgment.

12. A supporting diet embraces the animal essences, milk, and farinaceous articles. There is no risk in encouraging the patient to take nutritious food at any time during the progress of the disease; and there is reason to believe that danger from exhaustion may be forestalled by alimentation, together with the early employment of tonic remedies and alcoholic stimulants.

13. Purgatives, after the first stage, are not indicated, save when there is inconvenience from fæcal accumulation, and then the mildest remedies which will effect the object are to be preferred.

14. Opium, given, not to relieve pain or allay cough, but to tranquillize, promote sleep, and render the system more tolerant of the

local affection, is a valuable remedy in pneumonia. It is indicated by unusual disturbance of the circulation and nervous system, and its good effect is shown by a marked improvement in all the symptoms. This remedy does not retard the resolution of the local affection. It conduces frequently to improvement as regards delirium.

15. Soothing and supporting measures are especially called for in cases of pneumonia distinguished as asthenic and typhoid, and when pneumonia occurs as a complication of the eruptive and continued fevers.

16. The occurrence of pericarditis as a complication is an additional reason for the supporting treatment.

17. In convalescence from pneumonia, there is not much, if any, danger of relapse, and the recovery is more rapid if a substantial diet be allowed, and the patient permitted early to sit up.

The Italian Campaign of 1859. *Medico-Chirurgical Letters from General Head-Quarters.* By Dr. A. Bertherand, Principal Medical Officer of the First Class, etc., etc. Translated for the American Medical Monthly.

LETTER I.

Departure from Algeria—The Passage—The "Bretagne"—Genoa—Its Hospitals—Its University—Its Anatomical Museum.

To Professor Pécholier:

My Dear Colleague—At the time of my departure, on the 7th of May last, you made me promise, together with several of our colleagues in the Medical School of Algeria, to send you occasional tidings of myself, or rather—let me drop my own individual insignificance in view of the great events of the day—*tidings* of the *Army of Italy.*

I enter upon this engagement the more willingly, as it furnishes me an opportunity of indicating the value which I attach to the sympathies sprung from our common efforts to put into operation a useful project. I feel an earnest desire to continue those relations, interrupted, indeed, for a time, by an imperative duty, but kept fully alive by the hope of one day re-establishing them more firmly than ever. If, in writing to you, I borrow the columns of the *Gazette Médicale of Algeria,* do not attribute to me the ambitious design of wishing to make public notes hastily stolen during the brief halts of the march. I do but yield to the necessity of testifying, by the souvenir, my gratitude to my old readers, and to our worthy colleague, Dr. E. Kolb, who is so good as to assume in my absence the irksome duty of Editor *ad interim.*

For a passenger in the "Bretagne," fifty hours only separate Genoa from Algeria, provided that, as on the days of the 8th and 9th of May last, neither wind nor wave oppose the powerful screw, which relentlessly drives the giant of the French marine before its unwearying paddles. The courteous hospitality with which Vice-Admiral Romain-Defossés does the honors of his table and his saloons, would still further shorten the distance, were it not for the one idea of disembarkation, which from the poop to the lowest battery, holds the entire vessel under the control of the most impatient excitement.

At last, early on the morning of the 10th, our glasses are directed over the starboard, towards the mountains of Corsica, whose pointed summits are clad in robes of condensed fog. Soon the Apennines rise upon our right, and here that cherished coast of the invalid tourist, Nice, Villafranca, Monaco, the Corniche road, and—we are in the Gulf! Before us, like the back of the stage, when the scenes are shifting, the City of the Doges seems to rise majestically from the bosom of the waves. On the horizon, white sails, among which the long black lines of smoke drift back from the steamers, speed their way to Genoa, Spezzia, Leghorn, Marseilles and Algeria.

But this animation on the sea is nothing in comparison with that which awaits us on the shore!

There, for two weeks past, twenty steamers have every day vomited forth soldiers, horses, mules, caissons, cannon, and projectiles of every kind. From Acqua-Verde to Rivarole, and the smiling vale of Polcevera on the west, and as far as the Exchange, the Porto del Arco, and the Ravine of the Bisagno, on the other side of the port, the camp unfolds itself across the patrician city, with its motley uniforms, and its din of drums and bugles. Along its whole length, applause, shouts, hurras, drown the deep voice of war.

'Tis the welcome of Italy, proclaiming the glory of France, who brings her liberty!

Genoa has opened to her avenging guests her most sumptuous palaces. The Commissary and the Commandant occupy the historic dwelling of Andrea Doria. Our general head-quarters await the Emperor at the Palais Royal, between the University and the Arsenal. The Provost Marshal is quartered in the Palais Balbi, not far from the Church of the Annunciata, with its naves glittering in gold and marbles. The immense hotels ranged along the *quai* of the old port, behind the Portici, overflow with officers.

At the time that we set foot upon the land, the sanitary department of the hospitals and ambulances, roughly sketched out by the

brief and hurried directions of the Minister of War, had scarcely begun to be formed. They were still awaiting from France a large amount of material and a corps of employees proportionate to the medical necessities of an aggregation of more than a hundred and twenty thousand men. Not to mention the noble mutilations of the field of honor, numerically dependent upon the number, the importance and the fortune of engagements, humanity bids us to provide also for the more obscure, but not less truly self-devoted, victims of fever, dysentery, typhus, and scurvy; those sad epidemics inevitably associated with the placing of an army in the field. Taking, then, the proportion of one-sixteenth of the entire force as the probable average of those disabled by disease, at any given moment, we have a total of eight thousand, for whom hospital accommodations must be arranged. While, until the arrival at Genoa of the honorable Dr. Baron Larrey, Inspector-in-Chief of the Medical Department, our colleague, M. Boudin, is occupied in seeking for positions adapted to this organization, the patients who present themselves day by day are received into the civil and military hospitals of the city. Charged with the duty of visiting these establishments daily, I take from my notes a few records of such a nature as to give you an idea of their arrangement and condition.

If the ancient rulers of the Mediterranean, in order to shelter their riches and preserve their power, erected monuments of Babylonish magnificence, which, even at the present day, constitute the pride of their disinherited successors, prosperity with them, let us bear in mind, did not forget the tithe due to misfortune and suffering.

Placed in the centre of the city, between the delightful promenade of Acqua Sola and the Post-Office Square, the civil hospital might certainly be added to the proud list of the *twelve palaces* of the *Via Nuova*. Four grand structures, inclosing a square court, and surrounded by arched corridors, properly constitute this fine edifice. It is capable of receiving eight hundred patients. You enter by a large vestibule, on which open the guard-rooms and offices; opposite, a marble staircase leads to the first story, under a species of portico, adorned by a colossal statue of the original founder of the institution.

On the right and left of the court are the medical and surgical clinics. Above the ground floor, the halls corresponding to the four sides of this rectangle, communicate freely with one another, thus forming one single immense dormitory. The pharmacy, the lying-in department, and the anatomical theatre, are attached as dependencies

to this magnificent Nosocome, whose vast proportions render it a veritable monument of Genoese benevolence.

We should have nothing but praise for the plan of its construction, were not the advantages of its lofty wards, here, as at Alexandria, Verceil, and Novara, neutralized by the fatal custom of ranging the patients on four rows of beds. This disposition of them shocks too deeply our ideas of hygiene, to have left me to be the only one to point out its dangers to MM. Ramorino, Bignone, father and son, Botto, and other Italian confrères, whose names I have lost, without having forgotten their cordial affability.

There were not more than seventy-nine French patients at Pammatone at the time of my departure, the majority of them being affected with angina, acute rheumatism of a very intense grade, diarrhœa, bronchitis, and in a few instances, pneumonia. Arthritic and pulmonary affections are, it appears, very common in Genoa, nor on that account less violent. The native physicians treat them exclusively by repeated general bleedings and a profusion of leeches; as though to prove once more that "*no man is a prophet in his own country*," the contra-stimulant mode of treatment is almost completely out of use here. Do the atmospheric conditions which the city owes to its topographical situation between the sea and the maritime Alps, confer upon local disorders an inflammatory character of sufficient intensity to justify such a use, I had almost said abuse, of depletion?

Manicome, the Hospital for Chronic Diseases, and the Division Military Hospital, also attract the attention of the physician in Genoa.

The little that I was able to see of the first, only authorizes me to speak of it as attesting the style of luxury and comfort in which it is furnished. In the second, five hundred invalids find an asylum. It is still, like Pammatone, richly endowed, in spite of the sad breaches which the vicissitudes of war and revolution have made in its ample revenues.

I regret that I am unable to pen a similar eulogium on the situation and general appearance of the Military Hospital of Sardinia, intrusted to the enlightened medical direction of the Division Surgeon M. Nicolis and Professor Rossi. This establishment has been located in an old convent, shut in at the foot of the rocky hill which bounds the port of Genoa on the west, and in no respect meeting the exigencies of the object to which it is assigned. Destitute of ventilation, damp from situation, and perhaps, too, from want of proper care, its wards and corridors offend the nose as much as they do the

eye. Out of two hundred and thirty-five French soldiers whom I found here on the 16th of May, one-third had been lodged in a granary, temporarily transformed into an appendage to the hospital, and were hence subjected to much discomfort.

The first care of the French authorities, on arriving at Genoa, was to possess themselves of the fine barracks of San-Benigno, which command the new mole. Of these two large buildings, the *lower Quarter* was at once set apart as a hospital, under the direction of the principal medical officer, M. Maupin, assisted by some fifteen Sardinian physicians or surgeons, for whom requisition was made by the Commissary. But up to the present time, the French Medical Board exerts its salutary influence at San-Benigno only. Such a condition of things will, without doubt, be merely temporary, and will cease upon the arrival of the military surgeons now imperatively demanded in France. Without doubting the least in the world the zeal, the science, and the humanity of our colleagues in Genoa, and even while paying a just tribute of gratitude to their good intentions and their assiduity, it remains none the less a fact, that a staff thus constituted will work but very imperfectly at best. Suffering has its instincts, its caprices, its prejudices, which ought to be respected. Confidence on the part of the patient in the physician appointed to take care of him, is inspired by fellowship of country, and community of habits and language. Never, in spite of political alliances, will the attentions of a foreigner rise to the height of that brotherly love inspired by a national fellow-feeling, which alone can effectually supply the place of the absent family.

I will not leave Genoa without taking you, by the aid of a reflection of the impression which these places have left upon my mind, to the Academy, and the Museums of Natural History and Anatomy. The Academy, where science too dwells in a *palace*, contains fine specimens in the different departments of natural history. Mineralogy, especially, feels the benefits of this Alpine neighborhood, without which, all the gold of the Doges could not have made Genoa anything but an ordinary city, barren of colonnades and porticoes.

The anatomical theatre possesses a fine collection of urinary calculi. I noticed here, among other curious specimens, a second cervical vertebra, in the body of which was buried a steel blade, the result of a stab with a stiletto, falling behind the nucha, and passing quite beneath the occipital bone. The *Portinajo* will not fail to stop you before that feminine stone, the nucleus of which is a hair-pin which had strayed to some little distance from its official position. If I had but

the time, I would lead you from *Acqua Sola*, by way of San Lorenzo and San Georgio, across old Genoa to the Exchange and Portici.

But, they have had a fight—read! They have beaten the Austrians at Casteggio and Montebello. The wounded are already arriving at Alexandria; the electric telegraph calls for the ambulance of the Head-Quarters: in two hours we shall be at our post. I must leave you, my dear colleague, in haste, and with no rhetorical precaution. All is fair in war!

Another day I propose to continue this chat, if it will interest you —and if our friends, the Austrians, permit it!

Fortunately, the Zouaves are there before me. For a short time, then, yours from the heart.

GENOA, *May* 21*st*, 1859.

REVIEWS AND BIBLIOGRAPHY.

Border Lines of Knowledge in some Provinces of Medical Science. An Introductory Lecture, delivered before the Medical Class of Harvard University, November 6th, 1861. By OLIVER WENDELL HOLMES, M.D., Parkman Professor of Anatomy and Physiology. Boston: Ticknor & Fields. 1862.

Whenever Dr. Holmes serves up a dish, we feel that we are going to have something that will relish. No matter how trifling the delicacy, it comes to us well seasoned. The palate is tickled, deglutition becomes easy, and digestion goes on most comfortably and satisfactorily. There is nothing underdone about it on the one hand, nor on the other is its juice extracted by long maceration in the tepid water of many words. Whatever of nutritious material it contains—and it is not generally by any means destitute of the nitrogenous elements—is entirely capable of assimilation. In other words, he knows what he is talking about, and how to talk about it—two requisites as rare as they are important. To these qualities he adds a most happy aptitude for the perception of analogies, which always make a style attractive, although we cannot but think that in some cases he suffers it slightly to warp his judgment. The little essay before us, designed to show how far the different branches of our science have progressed on the road to perfect knowledge, and where they have met with barriers thus far insurmountable, is no exception to the rule of these

remarks. How apt and terse, for instance, is this opening idea, which follows an appropriate tribute to those who have filled the place of Demonstrator under him—Parkman, Kneeland, and Hodges: "Science is the topography of ignorance. From a few elevated points we triangulate vast spaces, inclosing infinite unknown details; we cast the lead, and draw up a little sand from abysses we shall never reach with our dredges. The best part of our knowledge is that which teaches us when knowledge leaves off and ignorance begins." And again: "Do not expect too much ground to be covered in this rapid survey. Our task is only that of sending out a few pickets under the starry flag of science, to the edge of that dark domain, where the ensigns of the obstinate, rebel ignorance, are flying undisputed. We are not making a reconnoissance in full force, still less advancing with the main column. But here are a few roads along which we have to march together, and we wish to see clearly how far our lines extend, and where the enemy's outposts begin."

In chemistry, the Professor says we have learned very much as to the '*how*,' but very little, if anything, as to the '*why*.'

The facts of *allotropism*—of *catalysis*, which he fancifully declares causes a substance to "play the part of the unwedded priest, who marries a pair, without taking a fee or having any further relation with the parties,"—and of *Isomerism*, are stubborn facts, which are as yet entirely outside of the pale of our general laws. "The problem of force meets us everywhere, and I prefer to encounter it in the world of physical phenomena, before reaching that of living actions. It is only the name for the incomprehensible cause of certain changes known to our consciousness, and assumed to be outside of it. For me it is the Deity himself in action." This we presume to be nothing more than the teaching of orthodox theology, that the "laws of nature" being the exercise of the power of the Supreme Ruler, that power must be constantly exercised, in order that these laws may be perpetually sustained.

Descriptive Anatomy was pretty much finished by Vesalius and Albinus; our gain has been in the anatomy of the tissues and in regional anatomy; and when we add to these microscopic anatomy, we have gone far towards making the science a perfect one.

In Pathological Anatomy and Physiology, too, the microscope is making great advances for us. In the discovery of the cell organization "we have discoved the working bee in this great hive of organization. We have detected the cell in the very act of forming itself

from a nucleus; of transforming itself into various tissues; of selecting the elements of various secretions. But why one cell becomes nerve and another muscle, why one selects bile and another fat, we can no more pretend to tell, than why one grape sucks out of the soil the generous juice which princes hoard in their cellars, and another the wine which it takes three men to drink—one to pour it down, another to swallow it, and a third to hold him while it is going down." Here, again, we have reached the border line. To say, as Freke does, that *organic affinity* is the ruling principle, is simply to use a word to describe our ignorance.

The author considers that the question as to the acid of the gastric juice is settled in favor of the lactic. The existence of *protein* is doubtful; nor can the theory that nitrogenous food alone is *plastic*, and non-nitrogenous only *calorifacient*, be sustained.

In speaking of the minute anatomy of the nervous centres, he alludes in terms of high commendation to the exquisite microscopic photographs of Dr. Dean, (a recent graduate of the Harvard school,) from sections of the medulla oblongata, which appear to him to "promise a new development, if not a new epoch, in anatomical art."

"In the brain we are sure that we do not know how to localize functions," and hence it follows that phrenology is "left, *sub Jove*, out in the cold." "It does not stand at the boundary of our ignorance, it seems to me, but is one of the will-o'-the-wisps of its undisputed central domain of bog and quicksand." After referring to some of the points recently made out in regard to the physiology of vision, the author concludes this part of his subject, and proceeds to consider the principles which should guide us in our treatment of the sum of vital unities constituting the frame of man, when assailed by disease. And here it is that we are inclined to think that his fondness for analogies has led him a little astray.

Because we restore scrubby trees to a state of health, by digging around and dunging them, rather than by administering purgative doses of calomel and jalap, he concludes that the same course is the true one to be pursued towards the human being. We felt inclined, after hastily running over his argument, to reply to him as the child did to its fond parent who wished to reconcile it to early hours of retirement, by citing the example of the sheep: "But, pa," said the little logician, "I'm not a sheep!" So would we say: "But, dear doctor, our patients are not trees." But a more careful perusal shows us that he acknowledges the fact, that if a man be a plant at all, "he is, at least, a very curious one; carrying his soil in his stomach, which is a kind

of portable flower-pot, which he grows around instead of out of." We consider that the analogy fails in the first place, because of the totally different conditions of existence of the plant and the animal; and secondly and principally, because we know of no diseases in the plant *but* those of nutrition. Acute inflammation, or indeed acute disease of any kind, is a process not to be conceived of in a plant, and occurring in a human being, springs up entirely independently of any vice of nutrition. How, then, is that which is in no way dependent for its existence upon nutrition or mal-nutrition to be remedied by a modification of nutrition? The author admits that even in the case of vegetables, an element which is not a material constituent of the vegetable structure, "may be employed for the purpose of killing parasites." Now it is still a question with those who have paid the most careful attention to the subject, whether many of the diseases to which the human body is incident may not be due to the presence of animal parasites or minute fungi in the circulating fluid. And if such poisons exist in the blood, why may not their antidotes be discovered, as well as for those palpable and known poisons which are purposely introduced through the medium of the stomach? And when Nature is attempting to relieve herself of a morbific influence, why is it a strange thing to suppose that some substance foreign to the human body, and in no way capable of aiding its nutrition, may be able to assist in the process, by virtue of its peculiar action on the eliminating organs? It is all very well for the professor to say that "he trusts that the youngest student on these benches will not commit the childish error of confounding a *presumption against* a particular class of cases with a *condemnation* of them," but if the argument from analogy thus suggested be strictly followed, it strikes at the root of our whole system of therapeutics. He has such an irresistibly comic way of putting things, however, that one cannot long feel out of humor with him. For example, he tells us that "copper, antimony, and other non-alimentary simple substances are, every one of them, intruders in the living system, as much as a constable would be quartered in our household. This does not mean that they may not, any of them, be called in for a special need, as we send for the constable when we have good reason to think we have a thief under our roof; but a man's body is his castle, as well as his house, and the presumption is, that we are to keep our alimentary doors bolted against these perturbing agents."

Were this idea merely a fanciful analogy introduced for the sake of illustration, it would not require more than an allusion. But we re-

gard it as an index of the tendency which the writer's mind has exhibited, now these many years, toward a condition of universal incredulity. There is danger that the same error which has crept into his theology will taint his medicine. Failing to recognize the soul of man as radically diseased, he fails to see the necessity for the remedies of the Great Physician; and in like manner regarding the body of man as absolutely healthy, he cannot appreciate the necessity for anything more than the favorable hygienic conditions to counteract its little deviations from the normal standard.

While we fully agree with him, that the "instincts of the sick" should be more carefully studied, and less persistently thwarted, and that very much may be accomplished by proper attention to the diet, we firmly believe that many of these *alien elements* have for their especial and only object the restoration of the diseased frame to health.

In speaking of the cyclical changes in medical doctrine, which he thinks not at all due to any change in the constitution of disease, (and here too we must differ from him to some degree,) he points out the cheering fact, that each return to the opinions of former days brings us somewhat in advance of them. A theological professor of this city is accustomed to describe the progress of the world as being in the direction of a spiral, continually returning to the same latitude which it occupied decades ago, but on each return occupying a more advanced position than it did when there before. So it is with medical science. There is real progress, though at times with apparent retrogression.

We would advise every physician to read this little essay. We can promise our brethren an hour's enjoyment while so occupied, and can assure them that it will set them to thinking, which cannot be said of many a more pretentious volume which appears from the modern press. ☞

EDITORIAL AND MISCELLANEOUS.

— THE COMMENCEMENTS.—A stranger dropping in at the meetings of the Academy of Medicine or the Pathological Society during the past month, would have wondered at the slimness of the attendance, as compared with that of a month before. It is to be accounted for by the fact that the examinations were just then coming on at all the colleges, and, as perhaps the largest proportion of the attendance at

our Societies consists of students, their absence creates a noticeable vacuum. Besides, their absence necessarily induces that of examining professors and of cramming quizzers, who also are of the class who devote themselves most diligently to the interests of the science, as represented in our medical societies. This brief agony, however, is now over. Those students who, by a proper use of the ample advantages which the schools of our city afford them, or by an improper use of the facilities afforded by a wholesale "quiz," have passed their "great go," know it, and have already, in the presence of admiring crowds and their best broadcloth coats, received the magic *pergament* which confers upon the much-coveted title. While those who have "flunked" also know it, and have retired to the shades of private life, either with the determination of otherwise devoting their misapplied energies, or of bravely going to work again, and conquering the obstacles, which this time proved too much for them.

Notwithstanding the unfavorable prognostication for a harvest, which the unsettled state of the country gave in the commencement of the session, the educational mills seem to have ground quite a fair grist.

The first to show its results, taking them in the chronological order, was the NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL. The Commencement was held in the College Building, on Tuesday evening, March 4th. The degrees were conferred by the Rev. J. M. Mathews, D.D. Prof. Percy delivered the Valedictory Address to a graduating class of eleven.

The UNIVERSITY followed on Thursday, the 6th, Chancellor Ferris conferring the degree of M.D. upon a class of sixty-five. The Valedictory Address was delivered by Prof. Van Buren. The following prizes were awarded:

Dr. Mott's silver medal, to W. H. Bates, New York; Dr. Mott's bronze medal, to W. H. Mather, Connecticut; Dr. Van Buren's first prize, to Eugene S. Alcott, New York; Dr. Van Buren's second prize, to W. H. Bates, New York; Dr. Metcalfe's first prize, to J. H. Mills, New York; Dr. Metcalfe's second prize, to A. S. Laubach, Pennsylvania.

Third in order came the BELLEVUE HOSPITAL MEDICAL COLLEGE, New York's youngest-born; but a right sturdy bantling did it prove itself. Its first Commencement took place at Irving Hall, on Monday evening, the 10th inst.

The President of the Faculty, Dr. Isaac E. Taylor, read the list of

graduates, amounting to twenty-eight, and made a few appropriate remarks in presenting the diplomas.

Prof. George T. Elliot followed in a Valedictory of unusual eloquence and pathos. We make the following pertinent extracts:

"In the suburbs of our city, on the margin of a broad river whitened by the sails of a sleepless commerce, there may be seen the noblest range of buildings in the State, where a thousand windows sparkle in the cheering rays of the sun, as they stream into wards devoted to the solace of every human woe—'Where hopeless Anguish pours his groan, and lonely Want retires to die.'

"You know those places well. There, in the shadow of those vast Hospitals, have you been armed for your struggle with disease. In these wards, by those bedsides, have you seen the patient application of the searching analytical laws by which we seek to discover the essentiality of disease. There you have seen the physician's triumph in success from the joy of convalescence; there you have seen his comfort after failure in the absolute proof of a correct diagnosis, and the employment of the best resources at his command. 'By medicine life may be prolonged, yet Death will seize the doctor too.'"

The opportunities enjoyed by the physician for obtaining an insight into human nature, in all its phases, conditions, and gradations, were thus happily alluded to:

"But how sublime, how touching a spectacle is that of humanity in all its gradations, from the throne to the hovel, swaying together, and reaching a common level before the same emotions! In the spacious halls of Windsor Castle, guarded by the best sanitary precautions of the age, the Prince Consort of England, in the prime of life, succumbed to that fever which it is the pride of sanitary science to avert; while but a moment later the throng of miners in Hartley Colliery perished from one of those accidents which no engineering skill can positively prevent, and a village became desolate. Struggling through cold courtly conventionalities, the widowed Queen calls aloud to the widowed peasant, and their voices mingle in the diapason of a common lamentation. From the chamber of death, through the house of mourning, the physician daily passes to the contemplation of the purest joys which bless the pilgrimage of men. He sees the humble home illumined by the smile of a contented spirit, and finds envy enthroned amid luxurious decorations. The extremes of the social scale meet him in the same spirit. He listens to the simple recitals of magnanimous self-denial, and to the fretful whims of pampered self-indulgence. No Asmodeus ever saw society so truly as it

is. No other profession ever brings man so unreservedly in contact with his fellow-man at every step of life from the cradle to the grave. These influences form the character of the true physician, and make him tolerant, liberal, forgiving, humble. To him, more than to any other man, belongs the blessed privilege of explaining faults of character, not only by faults of education, but by the influences of disease so often lurking in the attributes of health. Like Ithuriel, he touches with his spear the evil spirit poisoning the brain, and Reason once more resumes her sway over the troubled mind. From the study of these influences, and from the daily recognition of their effects in the sins of omission and commission, the physician sees further than others can possibly be expected to see into the grand mystery which surrounds the reconciliation of Infinite Justice with Infinite Mercy."

The audience were then addressed by Mr. Simeon Draper, President of the Board of Commissioners of Charities and Correction, who briefly acknowledged the services which the physicians of New York had rendered to her free asylums for the poor and unfortunate. The Class-Valedictory was delivered by Mr. Van Buren Hubbard. The final address, by the Rev. Dr. Chapin, who "appeared," as he said, "by the advice of eminent physicians," was in that gentleman's usual eloquent and pointed style.

The following resolutions, handed to us by members of the class, appear appropriately in this connection.

At a meeting of the students of *Bellevue Hospital Medical College*, the following resolutions were unanimously adopted:

Whereas, During the present Session of 1861–2, the Faculty of the *Bellevue Hospital Medical College* have been unceasing in their labors and endeavors to place within our reach every possible means and privilege for the interest and benefit of the class attending; and in view of the foregoing facts, deeming it just and proper that we should give public expression to the feeling of perfect satisfaction which the course of instruction received during the past term has given to every member of this class: Therefore,

Resolved, That as an expression of our appreciation of the unremitting interest they have manifested in all departments of instruction, and as a slight return for the many benefits we have received, we hereby tender to the *Faculty* of the *Bellevue Hospital Medical College* our sincere and heartfelt thanks.

Resolved, That the Commissioners of Public Charities and Correction, by giving students of medicine access to the public institutions under their charge, thus granting them extraordinary facilities for the practical study of disease in all its forms, have conferred a great benefit upon the medical profession, and consequently upon the community at large.

Resolved, That it is our unanimous conviction, founded upon the past winter's experience, that the *Bellevue Hospital Medical College*, from its thorough combination of didactic with clinical teaching, and from its intimate connection with the most extensive hospitals on this continent, offers advantages and facilities for the acquisition of a thorough practical education heretofore unknown in this country.

Resolved, That Messrs. Peck, Dwight, and Daniels be appointed a committee to present a copy of these resolutions to the Faculty of Bellevue Hospital Medical College, also to the Commissioners of Public Charities and Correction, and secure the publication of the same in the *American Medical Times* and New York MEDICAL MONTHLY.

A. G. AVERY, M.D., *Chairman.*

E. B. MILLER, M.D., *Secretary.*

The Medical Department of Columbia College, more familiarly known as the College of Physicians and Surgeons, which, by-the-way, we have always considered as rather a misnomer for an educational institution, closed the Commencement season on Thursday evening, March 13th. The exercises were held at Dr. Parker's Church, corner of Fourth Avenue and Twenty-second Street.

The venerable Dr. Delafield presented the diplomas, and made a brief but effective address. The Valedictory was delivered by Dr. Field, a member of the class.

The number of graduates was sixty-eight, including those who came up for graduation at the autumnal examination.

At the conclusion of the Commencement exercises, the Annual Oration before the Alumni Association was delivered by D. Tilden Brown, M.D.

The entire number of graduates at the four colleges was therefore one hundred and seventy-two, indicating by no means so great a falling off as the present troubles had led us to anticipate, or as the Philadelphia institutions have suffered.

— At the meeting of the Academy of Medicine, held Wednesday evening, March 19th, Prof. Barker's Propositions on the Use of Chloroform in Obstetrics came up for decision, according to the notice given at the last meeting.

On motion of Dr. Griscom, however, the whole matter was tabled. The ground which the doctor took in offering the motion, viz., that the Academy of Medicine is not competent to decide upon purely scientific matters, and that such decision does not come within the scope of its powers, we consider at least debatable, if not utterly unsound. We may take occasion at some future time to give our reasons for so thinking. We were somewhat surprised that no Fellow attempted to dispute the point.

Dr. Stevens offered the following resolutions, justly eulogistic of those members of our profession now serving their country on the battle-field. They passed amid much enthusiasm, and were ordered to be transmitted to the medical journals throughout the country:

Whereas, During the present unhappy war many of our professional brethren in service among the combatants have risked their lives, or gone into voluntary captivity, rather than desert their sick and wounded, and have exercised their skill alike on friend and foe: Therefore,

Be it Resolved, That in such conduct this Academy recognizes the true spirit which should ever animate the ministers of humanity; and in testimony whereof,

It further Resolves, To welcome to its sittings those who have acted under these self-sacrificing and generous impulses.

— It will be noticed by reference to our advertising pages, that in consequence of the absence of Prof. Doremus, who has just sailed for Europe, and of Prof. Dalton, who is serving his country in a professional capacity, the Chairs occupied by those gentlemen in the Long Island College Hospital will be filled respectively by Prof. Darwin G. Eaton and Prof. Austin Flint, Jr.

— ERRATUM.—In Dr. Hartmann's paper entitled "Medicine from the Human Body," in our March number, in the seventh line from the bottom of the first page, for "national materia medica," read "rational materia medica."

— NEW HOSPITALS AT WASHINGTON.—We learn from the *Washington Republican* that the Government is making ample preparations for the accommodation of the sick and wounded soldiers, in the erection of two immense hospitals, under the approval of the Sanitary Commission.

Each hospital will cover about an acre and a half of ground, and is of framework. The description of the one in the Infirmary Square will answer for both. It will contain ten wards, besides a kitchen and administration building, and will be capable of accommodating upward of four hundred patients.

The administration building will be two stories high, eighty feet long and fifty-two feet wide, fronting on E street, and will be connected with the rear building by an immense corridor two hundred and seventy-five feet long; the wards, of which there will be ten—five on each side of the corridor—will be separated from the main building with a yard twenty-seven feet wide between them, to admit of light and free ventilation. Each of the wards will be eighty-four feet long and twenty-eight feet wide, and will be furnished with both gas and water. The surgery-room will be at the north end of the corridor, and will be fitted up with all the conveniences of a well-arranged hos-

pital. The kitchen, laundry, &c., will be on the east of the main or administration building. The whole structure will be three hundred and eighty feet long and two hundred wide. Each of the buildings rests on piles, and will be elevated about three feet from the ground, so as to exclude the dampness.

—THE RELATIVE ADVANTAGES OF THE FRENCH AND ENGLISH HOSPITALS has recently been engaging the attention of the Academy of Medicine of Paris, and of the French medical periodicals. M. Husson, Director of the Board of Public Assistance of Paris, writes as follows to the Academy on this subject. If his statement be true that the hospitals of London contain only 3,700 beds, New York is as much in advance of her as Paris is.

"The hospitals of London only contain 3,700 beds for a population which is double that of Paris. The hospitals of the latter city contain 7,000 beds, without counting the beds of the sick wards in the hospices; we have therefore to provide for greater wants under more difficult circumstances. Most of our hospitals are situated on high grounds or in the midst of plantations free from houses, as is the case with Beaujon, Lariboisière, Saint-Antoine, La Pitié, Cochin, the Enfants-Malades, and Necker. Nothing of the kind exists in London. With the exception of a single hospital situated near Hyde Park, all the hospitals of the city are built in the midst of populous districts, and in narrow streets. They have generally neither gardens nor courts, and the sick wards receive light from one side only, which is a great defect. There are even dissecting-rooms in several of the hospitals. Now these are the establishments which are compared to ours! It is true that the wards of these imperfect hospitals in general contain fewer patients than ours. The English like to leave large open spaces in their wards; but, by an illogical arrangement, they pack the beds closer together. There is no bad smell in the hospitals of London, although there is no artificial ventilation; and this advantage, with few exceptions, we certainly do not enjoy at Paris. But in London they open the windows during the doctor's visit, and several times a day, which explains the absence of smells. The English beds are much more simply constructed than ours, which are too complicated. There are no curtains to the English beds. The wards are warmed by fire-places, but it is a mistake to believe them sufficient to ventilate the wards, or to suppose that they can replace a well-arranged artificial ventilation. There are no refectories in most of the London hospitals. At Guy's Hospital the dining-tables are placed in the sick wards. I will not continue this parallel any further, but I beg the Academy to keep in mind, that various improvements, especially as regards the bedding, are in contemplation for the hospitals of Paris."

— VOLUNTEER SURGICAL AID TO THE WOUNDED passing through our city is about being systematized. The unexpected arrival of from one

to two hundred of the victims of Newbern, and the entire absence of preparation for their wants, elicited the following call, which appeared in the morning papers of Friday, March 28th:

The Surgeons connected with the different hospitals of New York and Brooklyn, and those who have served in those institutions as assistants, as well as other practitioners of Surgery, are invited to attend a meeting at the New York Hospital this day, (Friday,) at 2½ o'clock, to adopt measures for affording surgical aid to the wounded soldiers on their arrival and during their stay in the city.

VALENTINE MOTT, M.D.
ALEXANDER H. STEVENS, M.D.

In response, about fifty physicians met in the Governor's Room of the New York Hospital at the time specified. Dr. Valentine Mott was called to the chair, and Dr. H. B. Sands appointed Secretary.

An Executive Committee of eleven, to which were added Drs. Mott and Stevens, was nominated, with power to raise funds to open and furnish a Dispensary and Infirmary in such portion of the Park Barracks as the authorities may place at their disposal, and to call upon physicians who volunteer their services, by handing in their names to the Secretary, to serve in regular rotation, as emergency may require.

— MCCLELLAN ON DRUNKENNESS IN THE ARMY.—Higher testimony than this, in stronger terms, could not well be given against this most demoralizing vice. The General in-Chief says, in returning the unsatisfactory finding of a court-martial in which drunkenness was made a palliation for breach of discipline:

"No one evil agent so much obstructs this army in its progress to that condition which will enable it to accomplish all that true soldiers can, as the degrading vice of drunkenness. It is the cause of by far the greater part of the disorders which are examined by courts-martial. It is impossible to estimate the benefits that would accrue to the service from the adoption of a resolution on the part of the officers to set their men an example of total abstinence from intoxicating drinks. It would be worth fifty thousand men to the armies of the United States."

— Dr. James M'Ghie, Superintendent of the Glasgow Infirmary, as we notice in the *Medical Times and Gazette*, adds another to the list of useful men of whom our profession has recently been deprived by death. He was for many years co-editor of the *Glascow Medical Journal*, and contributed many of its most valuable papers. Among his efforts in the cause of science was that to introduce "oiled paper" as a substitute for oiled silk, India rubber, &c., in dressings. We find the following description of his method of preparing it in the

Boston Medical and Surgical Journal. It certainly deserves a trial in our hospital practice, at least. The following is the mode of preparation:

Take good "tissue" paper, free from holes, as many sheets as may be required; boiled linseed oil, say one quart; to which add one ounce sulphate of zinc, and reboil for an hour or longer. A little beeswax and turpentine may be added, while the oil is hot. Use a square board, larger than the sheet of paper. Coat the first sheet on *both* sides with a broad paint or paste-brush; the rest of the sheets only require to be coated on one side, as the oil strikes through. Place the second sheet on the top of the first, slightly projecting at one end, for the convenience of lifting, and so on, *seriatim.* When all the sheets are coated, hang them up to dry in a moderately warm place, for twenty-four hours. When taken down, each sheet may be dusted over with French chalk, which will prevent them from adhering. If sufficient wax and turpentine have been used in the mixture, the chalk dusting will not be needed.

Dr. McGhie, in his pamphlet, claims the following advantages for oiled paper as compared with silk:

1. *Economy.*—A sheet costs from one to two cents only.

2. *Transparency and Lightness.*—Applied over a stump or other cut surface, when hæmorrhage may be feared, the state of the part can be more readily seen. On account of its lightness, it is particularly useful in covering extensive burns.

3. *Adaptability.*—It can be nicely applied to any part, retaining the form impressed upon it. It is easily torn, while, at the same time, it can be made of any required strength by doubling or trebling it.

4. *Safety.*—The great objection to oiled silk (or even to gutta percha sheeting) is, that the expense tempts us to use it over and over again; and in this way disease is propagated. There would exist no such temptation with oiled paper, as it could only be used *once*, and all risk of contagion in this way would be avoided.

— That distinguished English physician and philanthropist, Dr. Southwood Smith, is also to be added to the list of lights gone out in the profession. He died at Florence, on the 10th of February, "manifesting," says the *London Lancet*, "to the last, the same calm and happy disposition, and the same unselfish thoughts for others, and forgetfulness of self, as had characterized him through life." To have deserved such a eulogy is not to have lived in vain. So may it be written of us when we pass away. ☞